Audit Report

OFFICE OF THE INSPECTOR GENERAL

TELECOMMUNICATIONS CIRCUIT ALLOCATION PROGRAMS - SAN ANTONIO AREA

Report No. 94-051 March 11, 1994

Department of Defense

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Acronyms

AFB	Air Force Base
AFC4A	Air Force Command, Control, Communications, and Computer Agency
AFNET	Air Force Integrated Telecommunications Network
AUTOVON	Automatic Voice Network
CCSD	Command Communications Service Designator
CISA	Communications Information Services Activity
CONUS	Continental United States
CSA	Communications Service Authorization
DCA	Defense Communications Agency
DCS	Defense Communications System
DCTN	Defense Commercial Telecommunications Network
DDN	Defense Data Network
DECCO	Defense Commercial Communications Office
DISA	Defense Information Systems Agency
DSN	Defense Switched Network
FTS	Federal Telephone System
RFS	Request for Service
TCO	Telecommunications Certification Office
TMSO	Telecommunications Management and Services Office
WWOLS	Worldwide On-Line System

INSPECTOR GENERAL
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March 11, 1994

MEMORANDUM FOR ASSISTANT SECRETARY OF THE AIR FORCE
(FINANCIAL MANAGEMENT AND COMPTROLLER)
DIRECTOR, DEFENSE INFORMATION SYSTEMS
AGENCY

SUBJECT: Audit Report on Telecommunications Circuit Allocation Programs - San Antonio Area (Report No. 94-051)

We are providing this final report for your review and comments. The report identifies reconfiguration and termination opportunities for leased long-haul, special-purpose telecommunications circuits.

Significant changes, in the form of Defense Management Report Decision No. 918, "Defense Information Infrastructure," and DoD Instruction 4640.14, "Base and Long-Haul Telecommunications Equipment and Services," transferred responsibilities for configuration management for Defense Communications System telecommunications circuits during our audit and subsequent to the issuance of our draft report. A detailed explanation of the changes is provided in the Background section in Part II of the report. The recommendations in this final audit report have been redirected accordingly.

DoD Directive 7650.3 requires that all audit recommendations be resolved promptly. Recommendations and monetary benefits are subject to resolution in accordance with DoD Directive 7650.3 in the event of nonconcurrence or failure to comment. It is requested that you provide comments on the redirected recommendations and the revised potential monetary benefits by May 10, 1994.

The courtesies extended to the audit staff are appreciated. If you have questions on this audit, please contact Mr. Robert M. Murrell at (703) 692-2945 (DSN 222-2945) or Ms. Annie L. Sellers at (703) 692-2890 (DSN 222-2890). The distribution of this report is listed in Appendix L.

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Office of the Inspector General, DoD

Report No. 94-051
Project No. 0RD-0043.01

March 11, 1994

TELECOMMUNICATIONS CIRCUIT ALLOCATION PROGRAMS - SAN ANTONIO AREA

EXECUTIVE SUMMARY

Introduction. This audit was performed as a segment of our Audit of Telecommunications Circuit Allocation Programs and involved reviews at various DoD organizations in the San Antonio, Texas, metropolitan area. For this segment of the audit, we evaluated single and multichannel (special-purpose) circuits in the San Antonio area. We performed the audit in two phases based on management responses to the draft of this report. The 857 Defense Communications System (DCS) circuits and associated equipment items we evaluated cost about $7.1 million annually, excluding overhead, rate stabilization, and common-user (general-purpose) subscriber charges.

Objectives. The overall objective of the audit was to determine whether DoD circuit allocation programs identified and used the most effective configurations for leased long-haul, special-purpose telecommunications circuits. The specific objectives of this segment of the audit were to determine whether the most cost-effective circuit configurations were used and whether existing leased telecommunications services were discontinued when no longer required.

Audit Results. For the DCS single and multichannel special-purpose circuits, reconfiguration opportunities were not effectively identified and requirements were not adequately revalidated. Of the 193 sampled circuits, 84 were not cost-effective and 8 were not required. In addition, one circuit, not included in our audit universe or sample, could be discontinued.

Internal Controls. The internal control program as it applies to circuit allocation programs is the responsibility of the communications commands within the Military Departments, Defense agencies, and the Defense Information Systems Agency. This audit was performed at the installation and activity level. Therefore, internal controls were not assessed during this audit.

Potential Benefits of Audit. Reconfiguration and termination solutions could reduce the cost of the 857 DCS circuits by a projected $2.6 million annually in FY 1991 dollars (plus or minus 16.9 percent at a 90-percent confidence level). Over FY 1994 through FY 1996, we determined that reconfiguration or termination opportunities in the San Antonio area could reduce costs by $8.9 million. Appendix J describes the potential benefits resulting from the audit.

Summary of Recommendations. We recommended that the appropriate users initiate Requests for Service to reconfigure or disconnect telecommunications circuits identified for reconfiguration or termination. Recommendation 1.a. in the draft report to determine the technical feasibility of reconfiguration has been deleted in the final report since our reevaluations determined technical feasibility and net cost avoidances for the circuits listed in Appendix C. Also, Recommendations 1.b. and 1.c. in the draft report were incorporated into final report Recommendation 1.

Management Comments. The Assistant Secretary of the Army (Financial Management) and the Assistant Secretary of the Air Force (Financial Management and Comptroller) concurred with the finding and recommendations, but neither concurred with the potential monetary benefits. Further, their comments were not fully responsive because the Army and Air Force did not consider all technical solutions available for achieving cost-effective configurations and did not include the detailed results of their determinations of the technical feasibility and associated net cost savings for circuits recommended for reconfiguration in the draft report. Consequently, we performed additional evaluations to determine the technical feasibility and associated net cost savings for circuits recommended for reconfiguration. The results of those reevaluation efforts are provided in this final report. Our reevaluation identified reconfiguration opportunities for the Army, the Air Force, the Defense Logistics Agency and the Defense Mapping Agency. The details of our reevaluation analysis are shown in Appendix C and a summary of the results of our reevaluation is shown in Appendix I.

Because of the changes in responsibilities discussed in the transmittal memorandum, we have redirected the recommendations. Therefore, the Defense Information Systems Agency is requested to review the circuits identified in the report for reconfiguration and the associated net cost savings and provide the results of their review only for those circuits determined not technically feasible to reconfigure. The Air Force is requested to review the circuits identified in the report for termination. A full discussion of management comments and audit responses are in Part II, and the complete texts of managements' comments are in Part IV of this report. We request that the addressees provide comments by May 10, 1994.

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This report was prepared by the Readiness and Operational Support Directorate, Office of the Assistant Inspector General for Auditing, Department of Defense.

Part I - Introduction

Background

The Defense Communications System (DCS) is a worldwide composite of DoD-owned and leased telecommunications subsystems and networks composed of facilities, personnel, services, and equipment under the management and operational direction of the Defense Information Systems Agency (DISA). The DCS provides long-haul, common-user or backbone (general-purpose) and dedicated or point-to-point (special-purpose) telecommunications services for the DoD and other Government agencies. The leased services consist of general-purpose networks, such as the Defense Information Systems Network (to be initially composed of the Defense Switched Network [DSN], the Defense Data Network [DDN], and Military Department subnetworks); the Federal Telephone System (FTS) 2000; and special-purpose circuits, trunks,[1] and networks. The DCS does not include communications facilities organic to military forces; tactical telecommunications; base communications (communications within the confines of a post, camp, base, and station, including local interconnect trunks to the first commercial central office providing service in the local area); or on-site facilities associated with or integral to weapon systems.

Requirements for telecommunications services are determined through organizations such as the headquarters of the Military Departments and Defense agencies, major commands, communications management offices, and installation-level organizations. The DISA operates the Communications Information Services Activity (CISA) (formerly the Communications Services Industrial Fund) to procure authorized commercial communications services, facilities, and equipment for the DoD and other Government agencies. This procurement function is carried out by the Defense Commercial Communications Office (DECCO), which is the operating arm of the CISA and a subelement of the DISA Acquisition Management Organization. The DECCO issues Communication Service Authorizations (CSAs) as part of the procurement process to obtain telecommunications services.

CSAs are service contracts normally placed against basic ordering agreements established by DECCO with various communications vendors. CSAs are authorized by the Telecommunications Management and Services Office (TMSO) through Telecommunications Service Orders. The TMSO is also a subelement of the DISA Acquisition Management Organization. A Telecommunications Service Order is based on a Telecommunications Service Request that a DoD Component submits to the TMSO through its Telecommunications Certification Office (TCO). Each Telecommunications Service Request is based on a Request for Service (RFS) that a communications manager or user activity official (such as a local commander, a major

[1]A glossary in Appendix A defines communications terms used in this report.

command's communications manager, or a network's communications manager) submits to the responsible TCO. To connect new service or to reconfigure, reroute (rehome), or disconnect existing service, a communications manager or user activity official must prepare an RFS.

Within the Continental United States, the certification functions for the Departments of the Army, Navy, and Air Force are performed by elements of the U.S. Army Information Systems Command (U.S. Army Commercial Communications Office), the Naval Computer and Telecommunications Command (Navy TCO), and the Air Force Command, Control, Communications, and Computer Agency[2] (Air Force TCO), respectively.[3] Defense agencies are authorized to have their own internal certification function. The certification officials review each RFS, prepare the subsequent Telecommunications Service Request, and certify that each RFS is valid, approved, and funded.

The TMSO maintains the Worldwide On-Line System (WWOLS), a DCS data base that is composed of existing circuits and trunks, and assigns a Command Communications Service Designator (CCSD) to each circuit and trunk in the WWOLS. The CCSDs identify circuits and trunks leased and owned by the DoD. DECCO maintains a data base[4] that is used to record communications vendors' billings and the resulting payments, and in turn, the charges to DoD customers for communications services and resulting payments.

Objectives

This audit was performed as the first of three segments of Project No. 0RD-0043, "Audit of Telecommunications Circuit Allocation Programs." The other segments of the audit were performed in the Kansas City, Missouri, and the Jacksonville, Florida, metropolitan areas. The overall objective of the audit was to determine whether DoD circuit allocation programs identified and used the most effective configurations for leased long-haul, special-purpose telecommunications circuits. Specifically, the audit determined whether the most cost-effective circuit configurations were used and whether existing leased telecommunications services were discontinued when no longer required.

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[2]Formerly the Air Force Communications Command.

[3]Subsequent to our audit field work, the Assistant Secretary of Defense (Command, Control, Communications and Intelligence) directed in a memorandum dated October 1, 1993, that the TCO certification functions be transferred to DISA.

[4]Subsequent to our audit field work, the WWOLS and DECCO data bases, along with other information, were combined to form the Defense Information Services Database System.

In a draft of this report, we provided candidate circuits for reconfiguration to the Military Department and Defense agency communications managers to allow them to evaluate the candidate circuits and develop or propose more cost-effective solutions. However, in responding to the draft report, the Army and the Air Force did not consider all technical solutions available for achieving cost-effective configurations and did not include the detailed results of determinations of the technical feasibility and associated net cost savings for the candidate circuits. Consequently, we initiated a second phase of the audit and revised our universe and sample. We took extensive steps to verify the communication requirements and to reevaluate reconfiguration opportunities for the sampled circuits. This final report discusses our reevaluation of the candidate circuits.

Scope

Six DoD organizations in the San Antonio, Texas, metropolitan area were reviewed. During the first phase of this audit (details were provided in a draft of this report), our universe was comprised of 864 CCSDs in the WWOLS data base for DCS single and multichannel special-purpose circuits. The cutoff date of the universe data was October 6, 1989. General-purpose circuits were excluded from the universe. The special-purpose circuits cost the Government $7.9 million annually. Those costs were exclusive of overhead, rate stabilization, and general-purpose subscriber charges. From the 864 CCSDs, we randomly selected a statistical sample of 205 CCSDs that cost $1.7 million annually.

The universe for the second phase of the audit (discussed in this final report) was comprised of 857 CCSDs that cost $7.1 million annually. The statistical sample was comprised of 193 randomly selected CCSDs that cost $1.6 million annually. We did not assess the reliability of computer-processed data obtained from the WWOLS and the DECCO data bases that were used in the audit. Any inaccuracies in those data bases will not affect the results of the audit or the recommendations.

This economy and efficiency audit was made in two phases from February through May 1990 and from January through July 1991. The audit was made in accordance with auditing standards issued by the Comptroller General of the United States as implemented by the Inspector General, DoD. We reviewed current and historical records as they related to the audit cutoff date, October 6, 1989. A list of organizations visited or contacted is in Appendix K.

Internal Controls

The internal control program, as it applies to circuit allocation programs and is defined by the Federal Managers' Financial Integrity Act of 1982, is the responsibility of the communications commands within the Military Departments, Defense agencies, and DISA. Since the responsibility for internal controls for circuit allocation programs is not vested with the installation or activity communications management function, we did not assess internal controls.

Prior Audits and Other Reviews

Eight prior audit reports by the Inspector General, DoD, showed that similar problems occurred regarding uneconomical leases of telecommunications services and equipment and services and equipment no longer required. Details on those audits are discussed in Appendix B.

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Part II - Finding And Recommendations

Reconfiguration and Termination of Special-Purpose Circuits

Government organizations in the San Antonio area are paying for special-purpose circuits and equipment items that are either not cost-effective or no longer required. The Departments of the Army and Air Force, the Defense Logistics Agency, and the Defense Mapping Agency did not effectively identify reconfiguration opportunities and did not adequately revalidate requirements for 857 CCSDs representing telecommunications circuits and equipment items, costing about $7.1 million annually, that were leased or owned by DoD organizations in the San Antonio area. Of the 193 sampled circuits, 84 (43.5 percent) were not cost-effective and 8 (4.1 percent) were not required. During the execution of the FY 1994 through FY 1996 Future Years Defense Program, about $8.9 million could be put to better use if those 92 circuits are either reconfigured or terminated. Finally, for that same period, about $.015 million could be put to better use if one circuit that was not part of our audit universe or sample is terminated.

Background

Reconfiguration Guidance. In March 1973, the function of centralized management and engineering for all DoD nontactical, off-base multiplexing was assigned to the DISA by the Deputy Secretary of Defense. The assignment of that responsibility was incorporated in DoD Directive 5105.19, "Defense Communications Agency (DCA)," August 10, 1978. However, that Directive has since been revised, and the current Directive, "Defense Information Systems Agency (DISA)," June 25, 1991, does not clearly define who is responsible for multiplexing within the DoD. Further, Office of the Inspector General, DoD, Inspection Report No. 91-INS-08, "Defense Communications Agency," May 10, 1991, indicated the lack of clearly defined responsibility and states: "There is no single DCA organization executing the responsibility for circuit allocation, related circuit and trunk transmission engineering, and data base services (i.e., maintenance of the World-Wide On-Line System [WWOLS])." In December 1991, DoD guidance concerning circuit configuration management required the transfer of that responsibility.

DoD Instruction 4640.14 "Base and Long-Haul Telecommunications Equipment and Services," December 6, 1991, provided some clarification on responsibility for the reconfiguration of circuits. The Instruction states that the DISA shall manage and acquire long-haul telecommunications equipment and services for the DoD and that this responsibility includes determining which component (i.e., the common-user systems such as DDN or DSN) of the DCS or contract (i.e., FTS 2000 or new acquisition) will satisfy the DoD Components' long-haul telecommunications requirements. The Instruction further states that the DISA shall work with the DoD Components in planning for the most effective and economical long-haul telecommunications equipment and service acquisitions for the DoD. The Instruction also states that the DISA and the DoD Components shall ensure that the optimal mix of long-haul telecommunications equipment and services is installed to support mission requirements and that traffic studies, configuration analysis, and engineering shall be conducted for each DoD base, post, camp, station, and installation at least every 2 years.

Defense Management Report Decision No. 918 (Decision 918), "Defense Information Infrastructure," September 15, 1992, redirected additional tasks and functions in the communications area from the Military Departments to the DISA. Decision 918 states that the information structure supporting the Defense mission must provide Department-wide, end-to-end information support capability that encompass collection, generation, storage, display, and dissemination of information. Under Decision 918, the DISA became the central manager of the Defense information infrastructure, and that role includes network management, engineering, design, and control of long-haul and regional communications, as well as technical management of base-level communications.

Termination Guidance. Guidance on telecommunications services that are no longer required is in DoD Directive 4640.13 "Management of Base and Long-Haul Telecommunications Equipment and Services," December 5, 1991. The Directive states that the DoD Components shall discontinue telecommunications equipment or services for which a bona fide need no longer exists.

Verifying Communications Requirements and Configurations

To accomplish our audit objective, we took extensive steps to verify the communications requirements and configurations for the sample circuits. We reviewed current and historical records addressing the established configuration and requirements justifications, and we examined the physical locations for each of the sample CCSDs. We contacted all organizations within the Military Departments, Defense agencies, and DISA identified to us as having knowledge about the usage or requirement and configuration of a circuit. The contacts helped us to determine whether the requirement for the circuit was valid and to identify reconfiguration opportunities. We applied the following three criteria in determining whether the telecommunications services and configurations were justified.

o A need to communicate must have existed on October 6, 1989, the cutoff date of our audit universe.

o If a need to communicate existed, the sample circuit must have been configured in the most cost-effective manner.

o The user must have been able to physically locate the sample circuit.

If a sample circuit failed to meet any one of the criteria, we concluded that a valid requirement no longer existed for the circuit in its established configuration.

Circuit Reconfigurations and Disconnections

Reconfiguration Techniques. Reconfiguration techniques could include rehoming of circuits, dial-up service, and the use of general-purpose networks. Rehoming of circuits involves the diversion of a transmission medium from one switch or node to another switch or node. Normally, this diversion is made to the nearest location, and the result is either a more cost-effective leased circuit or the disconnection of a leased circuit and the use of a Government-owned transmission medium. Dial-up service is a temporary connection, via the public telephone network and normally precludes the need for a leased circuit. Utilization of general-purpose networks (such as the DSN, the DDN, or the FTS 2000) negates the need for a special-purpose leased circuit. The use of reconfiguration techniques has proved to be a source of significant savings and budgetary reductions for the DoD.

Multiplexing is another reconfiguration technique and consists of combining two or more independent circuits (e.g., voice, data, or video) into a composite signal through the use of equipment, such as a multiplexer or a sophisticated modem. The signal is then sent via the transmission medium to similar multiplexing equipment at the receiving end, where the process is reversed, restoring the circuits to their original state. This technique includes various combinations of single-channel circuits, multichannel circuits with idle capacity, or fully utilized multichannel circuits that can be consolidated into even larger multichannel circuits. It is more economical to use multiplexing techniques when the cost of leasing a number of independent circuits exceeds the cost of acquiring a multiplex system. With the advent of competition in telecommunications services due to the divestiture of the AT&T, multiplexing has become a very cost-effective technique in the management of special-purpose telecommunications services.

Reconfigurations. The potential exists for significant cost avoidances through the use of reconfiguration techniques. The circuits identified as candidates for potential reconfiguration in this audit should be reviewed by DoD communications managers to determine the technical feasibility of reconfigurations and the associated cost avoidances. From our sample of

193 circuits, we identified 84 (43.5 percent) circuits, leased at a cost of $865,560 annually as candidates for potential reconfiguration. If technically feasible, reconfiguration actions could avoid costs of $555,204 annually or 64 percent of the annual leased costs of the 84 sampled circuits and associated equipment items. Results of our analyses of various technical solutions and associated cost avoidances for the circuits in our sample are shown in Appendix C.

Our sampled circuits were identified as candidates for reconfiguration if they were not cost-effective in their established configurations. The specific technical feasibility and associated cost avoidances of reconfiguration solutions, however, need to be determined by DoD communications managers. Communications managers may be able to identify and should seek more viable technical and cost-effective solutions than our proposed options. Technical solutions that need to be considered in achieving cost-effective configurations include: multiplexing, rehoming special-purpose circuits to a general-purpose network, rehoming special-purpose access circuits within a general-purpose network, establishing dial-up service, and purchasing leased communications equipment.

Multiplexing. Forty-eight circuits, leased at a cost of $427,656 annually, could be reconfigured by establishing new multichannel trunks through multiplexing techniques. Reconfiguration of the 48 sample circuits could save $236,100 annually. The details on reconfiguration solutions are shown in Appendix C, Category 1, Tables 1. through 12.

Rehoming Special-Purpose Circuits to a General-Purpose Network. Fifteen circuits, leased at a cost of $196,668 annually, were acquired as special-purpose circuits, although the services could be provided by a general-purpose network. Rehoming the 15 sample circuits to a general-purpose network could save $145,200 annually. The details on rehoming those circuits are shown in Appendix C, Category 2, Tables 1. and 2.

Rehoming Special-Purpose Access Circuits Within a General-Purpose Network. We identified 14 DDN access circuits, leased at a cost of $88,416 annually, that were not connected to the nearest DDN node. Rehoming the 14 sample circuits to the nearest node could save $88,188 annually. The details on rehoming those circuits are shown in Appendix C, Category 3.

Establishing Dial-Up Service. Five special-purpose circuits, leased at a cost of $86,844 annually, did not have sufficient utilization (traffic volume) to justify dedicated service. An analysis of the traffic associated with those circuits indicated that establishing dial-up service for only the transmission time needed would satisfy the communication requirement. Establishing dial-up service and disconnecting the five special-purpose sample circuits could save $80,364 annually. The details on dial-up service for those circuits are shown in Appendix C, Category 4.

Purchasing Leased Communications Equipment. Two circuits with eight modems were leased at a cost of $5,448 annually. Purchase of the modems would be considerably more cost-effective. The modems and

associated maintenance could have been obtained through the Codex Bulk Modem Purchase contract maintained by the DECCO. Purchasing the eight leased modems could save $5,352 annually. The details on purchasing the equipment are shown in Appendix C, Category 5.

Disconnections. We identified eight circuits and associated equipment items, leased at a cost of $25,548 annually, that either were no longer required or could not be located. The eight circuits represent 4.1 percent of the audit sample reviewed and were being paid for by the Air Force. Sampled items were identified as candidates for disconnection if the need to communicate using the existing service, as of the cutoff date of our audit universe, was no longer required. Requests for Service or Telecommunications Services Requests, as appropriate, should be initiated through designated channels to terminate both the physical connection of the circuit and the payment to the vendor. Disconnecting those eight circuits could save $25,548 annually. Details on the circuits that are candidates for disconnection are shown in Appendix D.

Using statistical sampling techniques, we determined that reconfiguration and termination solutions could reduce the cost of the 857 DCS circuits by a projected $2,578,782 annually (plus or minus 16.9 percent or plus or minus $435,365 at a 90-percent confidence level). Our method was to add the potential annual savings for reconfigurations (after first allocating the potential annual savings to the circuits proportionately to their original costs) identified in Appendix C to the potential annual savings for terminations identified in Appendix D.

Non-Sample Circuit. During our audit work in the San Antonio area, we found that one circuit, leased at an annual cost of $2,256, was no longer required. The circuit was not a part of our audit universe or sample and was used by the Air Force. Disconnecting the circuit could save $2,256 annually. Non-sample items were identified as candidates for disconnection if the need to communicate using the existing service was no longer required.

Termination of the non-sample circuit could save $14,778 during the execution of the FY 1991 through FY 1996 Future Years Defense Program. An RFS or Telecommunications Service Request, as appropriate, should be initiated through designated channels to terminate both the physical connection of the circuit and the payment to the vendor. Potential cost avoidances that may be obtained by disconnecting the non-sample circuit are shown in Appendix E.

A summary of all sample and non-sample circuits recommended for reconfiguration and termination is shown in Appendix F. The projected cost avoidances that may be obtained for the Future Years Defense Program are shown in Appendix G for the sampled circuits and in Appendix H for the non-sample circuit. Appendix I shows the results of our reevaluation. Appendix J shows the summary of all potential monetary benefits ($16,770,978) resulting from the audit.

Recommendations, Management Comments, and Audit Responses

1. We recommend that the Director, Defense Information Systems Agency, take appropriate action to reconfigure circuits listed in Appendix C.

Changes to Recommendations for the Final Report. Subsequent to the issuance of the draft audit report, responsibilities for determining technical solutions and performing configuration management for DCS telecommunications circuits were transferred within the DoD, as described in the Background section in Part II. Our position is that the recommendation, if implemented, offers opportunities for substantial communications cost avoidances. We maintain that the DISA is in the best position to take appropriate action whether that action is directing the Military Department and Defense agency communication managers to reconfigure the circuits or instructing DISA communications managers to reconfigure those circuits on behalf of the DoD Components. Further, the Air Force Command, Control, Communications, and Computer Agency (successor organization to the Air Force Communications Command) has been designated as a field operating activity of the Office of the Deputy Chief of Staff, Command, Control, Communications and Computers, Department of the Air Force. The Office of the Deputy Chief of Staff, Command, Control, Communications and Computers is in the best position to take appropriate action to terminate Air Force circuits. Therefore, the recommendations in this final audit report have been redirected accordingly. Also, Recommendation 1.a. in the draft report has been deleted in the final report since our reevaluations determined technical feasibility and net cost avoidances for the circuits listed in Appendix C, and Recommendations 1.b. and 1.c. in the draft report were incorporated into Recommendation 1. Recommendation 2. in the final report was redirected to a higher level.

Army Comments. The Army concurred with the finding and recommendations in the draft report, but nonconcurred with the monetary benefits. The Army stated that the U.S. Army Commercial Communications Office examined each of the circuits identified in the draft report and found none that could be reconfigured to achieve cost avoidances. Further, the Army stated that since reconfiguration on a DoD-wide basis may produce different results and that if a DISA evaluation of DoD-wide reconfiguration indicates a more efficient configuration, the Army would initiate the appropriate RFSs. The Army agreed with the need to rehome two Fort Sam Houston, Texas, DDN access circuits but did not agree with the estimated annual cost avoidances. The Army contended that the leased cost of the equipment would still remain after the circuits are rehomed and that only the leased mileage cost would be eliminated. The complete text of the Army's comments is in Part IV of this report.

Audit Response. The draft report identified 15 Army circuits for reconfiguration and 2 DDN access circuits for rehoming. The Army's evaluation of the 15 reconfiguration candidates did not consider all technical solutions available for achieving cost-effective configurations as requested in the

draft report. Our reevaluations of the 15 circuits for reconfiguration showed that 5 were no longer reconfiguration candidates. The remaining 10 circuits are shown in Appendix I and details of our reevaluation are shown in Appendix C.

The reevaluations showed that the draft report conclusion for circuit UJNV 7BIT was in error. A valid configuration for that circuit did exist as of the cutoff date for the audit universe. We also agree with the Army's conclusion that multiplexing six circuits between Fort Sam Houston, Texas, and Austin, Texas, was not cost-effective. However, for two (see Appendix C., Category 2., Table 2.) of those circuits, a new routing could be established through connection to the DSN.

For the two DDN access circuits identified for rehoming, the Army did not fully consider purchasing rather than continuing to lease the associated equipment. Purchasing the equipment would eliminate any recurring leased costs; therefore, we contend that the monetary benefits for those two circuits are correct. Further, this final report identifies a third DDN access circuit for rehoming (see Appendix C., Category 3.). We ask that the DISA reevaluate that position in response to the final report.

Air Force Comments. The Air Force concurred with the finding and recommendations, but nonconcurred with the monetary benefits. The Air Force stated that the Air Force Command, Control, Communications, and Computer Agency (AFC4A) Pilot program and the Air Force Integrated Telecommunications Network (AFNET) bundle leased circuits for Air Force components. The AFC4A Pilot program reached initial operating capability on October 15, 1990, and a contract award was pending in response to the requests for proposal for the AFNET. Additionally, the Air Force plans to use those two networks to bundle 109 of the 124 sample circuits recommended for bundling in the draft report (see Appendix I). The remaining 15 sample circuits (see Appendix I) cannot be cost-effectively bundled because AFC4A and AFNET nodes were not planned at either one or both termination points for those circuits and the cost of bundling was too high to be cost-effective. Further, the Air Force has either debited the expected bundling savings in its budget submission for FYs 1992 through 1997 or credited the savings to Defense Management Review Decision 924. Additional bundling decrements are expected through Defense Management Review Decision 968 and Program Budget Decision 167.

The Air Force stated that its Concentrator Program requires Air Force DDN users to access the DDN through a single-base concentrator, which significantly reduces the Air Force's DDN and circuit costs. Over the last 2 years, the Air Force has procured and installed DDN concentrators at 128 bases and has directed rehoming of all host computers for those concentrators not later than December 31, 1990. The Air Force has already taken into account the resultant savings in determining its reduced FY 1991 DDN budget. The complete text of the Air Force's comments is in Part IV of this report.

Audit Response. The Air Force did not consider all available technical solutions for achieving cost-effective configurations; therefore, its comments are not responsive. The response discusses actions that are commendable, but the

programs identified were either available about 1 year after the audit cutoff date or were still in the planning stages. Further, the Air Force did not provide complete documentation to support its contention that resultant savings had already been credited. Since all technical solutions were not considered, we reevaluated the Air Force sample circuits. The results of the reevaluation are in Appendix I.

We commend the Air Force for establishing a Concentrator Program; however, we disagree that the Concentrator Program has taken into account cost avoidances we identified through rehoming DDN circuits to the nearest node in the San Antonio area. Although concentrators had been installed at all four bases in the San Antonio area for about 1 year before our audit, circuits still had not been rehomed to the concentrators. Additional cost avoidances are still available through rehoming (see Appendix C., Category 3.). We ask that the DISA reevaluate that position in response to the final report.

2. We recommend that the Deputy Chief of Staff, Command, Control, Communications and Computers, Department of the Air Force require the appropriate user organizations to initiate Requests for Service to disconnect their respective circuits listed in Appendixes D and E.

Air Force Comments. The Air Force partially concurred with the recommendation and stated the monetary benefits should be reduced by about $26,500 from the amount shown in the draft report. The Air Force stated that it requires a biennial review and revalidation of all its leased circuits and that four circuits identified in the audit for termination would most likely have been identified for termination during that exercise.

Audit Response. The Air Force's response on the 13 circuits recommended for disconnection was only partially responsive. In response to the Air Force comments, we reevaluated the sample circuits. The results of the reevaluation are in Appendix I.

The Air Force's biennial review and revalidation of leased circuits does not provide assurance that the circuits identified in the draft report would have been identified for termination or that billings and payments would stop. This audit and prior audits (see Appendix B) have shown that review and revalidation programs do not identify all circuits requiring revalidation and opportunities for reconfiguration or prevent payments for circuits designated for termination. Accordingly, we maintain that the cost avoidances identified in this report are valid. We ask that the Air Force reconsider its position in response to the final report.

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Part III - Additional Information

Appendix A. Glossary

Access Line	A circuit connecting a subscriber directly to a switching center or to a node in a switched network.
Allocation	The process of selecting and designating specific channels and trunks that will be used in routing a circuit or circuits to satisfy a customer requirement.
AUTOVON	Automatic Voice Network. A general-purpose switched voice network that provides unsecured voice communications services to DoD customers.
Bundle	A term often used to mean multiplexing or to consolidate circuits onto a larger trunk.
CCSD	Command Communications Service Designator. A unique identifier for each single service; that is single-channel circuits, multichannel trunk circuits, and interswitch trunk circuits.
Channel	A single unidirectional or bidirectional path for transmitting or receiving (or both) electronic signals, usually in a path that is distinct from other parallel paths.
Circuit	A communication capability between two or more users, between a user terminal and a switching terminal, or between two switches.
Concentrator	A telecommunications device that allows a number of circuits (typically slow-speed ones) to be connected to a smaller number of circuits for transmission under the assumption that not all of the larger group of circuits will be used at the same time.
DDN	Defense Data Network. A general-purpose packet switching network that provides direct data transmission communications services to DoD customers.

DSN	Defense Switched Network. A general-purpose network designed to provide switched voice, digital data, and video teleconferencing services to DoD customers.
FTS 2000	Federal Telephone System 2000. A general-purpose voice, data, and video network procured and managed by the General Services Administration.
General-Purpose Network	A system of circuits or trunks between network switching centers or nodes allocated to provide communications service on a common basis to all connected subscribers. It is sometimes described as a common-user network.
Modem	Modulator/Demodulator. A device that converts digital signals to analog so that they may be transmitted via conventional analog circuits or that converts analog signals to digital so that they may be received by digital terminal equipment or a computer.
Node	A tandem switch that collects data traffic from multiple transmission media and routes the data to other switches or nodes.
Packet Switching	A technique by which digital data are transmitted in packets (composed of a predetermined number of bits) and switched over a logical path, rather than a physical path as in circuit switching.
Rehome	The disconnection of a transmission medium from one switch or node and the reconnection to another switch or node.
Tail Circuit	A circuit that operates from the long-haul vendor's demarcation point.

TCO	Telecommunications Certification Office. An organization designated by a Federal department or agency to certify to the Defense Information Systems Agency (DISA) that a specified telecommunications service or facility is a bona fide requirement, and that the department or agency is prepared to pay mutually acceptable costs to fulfill the requirement.
Trunk	A dedicated circuit connecting two switching centers, central offices, or data concentration devices. This term is often used within the communications community to describe any multichannel circuit.
Switching Center	A point at which two circuits could be interconnected to make a path between two users.
WWOLS	Worldwide On-Line System. The DISA Telecommunications Management and Services Office maintains this data base inventory of Defense Communications System (DCS) circuits and trunks to reflect Telecommunications Service Requests and Telecommunications Service Orders. The WWOLS contains specific engineering, operational, and management data to support the circuit and trunk allocation and transmission engineering functions performed for DCS telecommunications services.

Appendix B. Prior Audits and Other Reviews

Office of the Inspector General, DoD, Project No. 0RD-0043.03, "Draft Audit Report on Telecommunications Circuit Allocation Programs - Jacksonville Area," December 15, 1993. The audit showed that reconfiguration opportunities were not effectively identified and that requirements were not adequately revalidated. The report showed that 63.9 percent of the 166 sample Command Communications Service Designators (CCSDs) reviewed at DoD and non-DoD installations and organizations in the Jacksonville, Florida, metropolitan area were potentially not cost-effective in their configurations or were no longer required. For the sampled CCSDs, the report identified 74 circuits (44.6 percent) as candidates for potential reconfiguration. Leases for another 32 circuits and associated equipment items (19.3 percent) could be terminated because they are no longer required. Reconfiguration or termination of those 106 circuits could reduce costs about $9.5 million during the execution of the FY 1994 through FY 1999 Future Years Defense Program. Finally, reconfiguration and termination of another 24 circuits that were not part of the audit universe or sample could reduce costs about $1.5 million during the same period.

Office of the Inspector General, DoD, Report No. 93-144, "Management of Leased Modulators/Demodulators by the Air Mobility Command," June 30, 1993. The audit showed that the Air Mobility Command did not prepare documentation required to discontinue payments for modulators/demodulators (modems) no longer in service, purchase rather than lease modems, and disconnect circuits that were no longer required. As a result, about $826,000 was spent for equipment no longer in service; about $1.3 million was spent for leased equipment that should have been purchased; and about $70,000 was spent for leased circuits that were no longer required. The audit also showed that at seven military installations, 53.6 percent of telecommunications equipment could not be accounted for and that the Air Mobility Command could not validate its telecommunications equipment inventories. Action to terminate lease payments, to purchase leased modems, and to disconnect circuits would reduce costs about $5.3 million (of which $784,000 was previously reported for Dover Air Force Base [AFB]) during the FY 1993 though FY 1998 Future Years Defense Program. We recommended that the Commander, Air Mobility Command, terminate payments for equipment no longer in service, purchase leased modems, disconnect circuits no longer needed, and conduct and maintain inventories of all leased and owned telecommunications equipment and services. The Air Force concurred with the finding and implemented corrective measures.

Office of the Inspector General, DoD, Report No. 93-021, "Management of Leased Modulators/Demodulators at Dover Air Force Base, Delaware," November 9, 1992. The audit showed that payments continued to be made for telecommunications equipment that was no longer in service and that equipment that should have been purchased continued to be leased. As a result, more than $287,000 had been spent unnecessarily from February 1990 through June 1992. Action to terminate leases and purchase modems would reduce costs about $784,000 during the FY 1993 through FY 1998 Future Years Defense Program. We recommended that the Commander, Air Mobility Command, terminate

leases for six long-haul modems and purchase replacement modems from the Bulk Modem Contract maintained by the Defense Commercial Communications Office (DECCO). The Air Force concurred with the finding and implemented corrective measures.

Office of the Inspector General, DoD, Report No. 93-019, "Disposition of Telecommunications Services and Equipment at Eaker Air Force Base," November 6, 1992. This audit identified telecommunications services that were not discontinued when service requirements no longer existed. The report showed that 5 (10.6 percent) of 47 long-haul telecommunications circuits reviewed at Eaker AFB, Blytheville, Arkansas, were no longer required. As a result, DoD could have avoided communications costs estimated at $19,000 if action had been taken to discontinue the services. When this matter was brought to management's attention, it took immediate action to discontinue the services and avoided additional costs of about $9,000 through December 1992, the planned closure date of the base. The Air Force concurred with the finding and monetary benefits and provided corrective measures to prevent similar conditions.

Office of the Inspector General, DoD, Report No. 93-018, "Disposition of Telecommunications Services and Equipment at Pease Air National Guard Base," November 6, 1992. The audit disclosed that existent services were not discontinued when communication requirements no longer existed. The report showed that 7 (46.7 percent) of 15 long-haul telecommunications circuits reviewed at Pease Air National Guard Base, Portsmouth, New Hampshire, were no longer required. As a result, DoD could have avoided communications costs estimated at $151,000 if action had been taken to discontinue the services. When this matter was brought to management's attention, it took immediate action to discontinue the services and avoided additional costs of about $272,000 during the execution of the FY 1993 through FY 1998 Future Years Defense Program. The Defense Information Systems Agency (DISA) concurred with the finding and monetary benefits projected in the report.

Office of the Inspector General, DoD, Project No. 0RD-0043.02, "Draft Audit Report on Telecommunications Circuit Allocation Programs - Kansas City Area," July 5,1991. The audit showed that reconfiguration opportunities were not effectively identified and that requirements were not adequately revalidated. The report showed that 60.6 percent of the 203 sample CCSDs reviewed at DoD and non-DoD installations and organizations in the Kansas City, Missouri, metropolitan area were either potentially not cost-effective in their configurations or were no longer required. For the sampled CCSDs, the report identified 94 circuits (46.3 percent) as candidates for potential reconfiguration. Reconfiguration actions for 48 of 94 circuits and equipment items could reduce costs about $161,000 annually. Leases for another 29 circuits and associated equipment items (14.3 percent) could be terminated because they are no longer required. Finally, the configurations of an additional 21 circuits that were not part of the random sample were found to be not cost-effective. Reconfiguration or termination of those 21 circuits could reduce costs about $198,000 annually or more than $1.3 million during the execution of the FY 1992 through FY 1997 Future Years Defense Program.

Office of the Inspector General, DoD, Report No. 91-110, "Quick-Reaction Report on the Reconfiguration of Automatic Voice Network Access Circuits - Kansas City Area," July 3, 1991. The audit showed that the DISA neither identified reconfiguration opportunities nor coordinated implementation of reconfiguration solutions when two or more DoD Components were involved. The report showed that less costly reconfiguration opportunities existed, but were not effectively identified or implemented for our universe of 109 CCSDs issued for Automatic Voice Network (AUTOVON) access circuits at 7 DoD organizations in the Kansas City, Missouri, metropolitan area. The report states that 41 (37.6 percent) of the 109 CCSDs reviewed were potentially not cost-effective in their configurations and showed that the 41 circuits were candidates for multiplexing. The reconfigured multiplexed circuits could result in DoD realizing cost avoidances of $658,000 during execution of the FY 1992 through FY 1997 Future Years Defense Program. The report recommended that the DISA initiate immediate action to reconfigure the 41 AUTOVON circuits. DISA agreed that while the recommendation was technically feasible, it was not compliant with the contract or the Defense Commercial Telecommunications Network (DCTN)/AUTOVON merger solution previously proposed by AT&T and agreed to by the Government.

As part of a resolution agreement, the DISA proposed that an audit be performed addressing the AT&T pricing of the DCTN/AUTOVON access lines to assist DISA and DECCO in conducting their annual rate review negotiations with AT&T. The annual rate review is required by the DCTN contract. Although the Assistant Inspector General for Auditing disagreed with DISA's position that it was inappropriate to implement the audit recommendation, both agreed that the audit would be performed to determine that the AT&T prices and approach under the DCTN/AUTOVON merger were adequately supported, cost-effective, and fair. It was also agreed that DISA's support for the audit would be the required action in lieu of implementing the recommendation in Report No. 91-110.

Office of the Inspector General, DoD, Report No. 90-005, "Requirements Validation for Telecommunications Services," October 16, 1989. The audit showed that 21 percent of the 1,323 sample circuits reviewed at 21 DoD installations continued in service although no longer required, were not cost-effective as configured, or could not be identified. For the sampled circuits, the report identified 135 circuits (10.2 percent) that were no longer required, 130 circuits (9.8 percent) that were considered not cost-effective in their configurations, and 12 circuits (1.0 percent) that could not be identified. As a result, leased circuits that are no longer required or not cost-effective may cost DoD as much as $21 million during FY 1989 and $117 million during the execution of the FY 1989 through FY 1993 Five Year Defense Plan. Several recommendations were made to the Assistant Secretary of Defense (Command, Control, Communications and Intelligence) and to the Comptroller of the Department of Defense, one of which was to establish a definitive policy requiring DoD Components to review and revalidate telecommunications circuits leased and owned by the Defense Communications System. The identification of reconfiguration opportunities was not addressed in that audit report. Management concurred in all recommendations in the report.

Appendix C. Schedule of Circuits Recommended for Reconfiguration

Category 1. Table 1. Establish a New Trunk Through Multiplexing Army and Defense Mapping Agency Circuits

CCSD [2]	Description	Kb/s [3]	From	To	CSA [4]	Leased Costs [1] Monthly Recurring Costs	Leased Costs [1] Annual Cost To DoD
UTNX 6J2N	DATA CIRCUIT	9.6	FTSMHSTN[5]	ST LOUIS[6]	AT 08 D 00014	$753	$ 9,036
NUED 7E8X[7]	DATA CIRCUIT	9.6	FTSMHSTN	ST LOUIS	AMSC D 00893	936	11,232
UUED 7EST	CHANNEL on 6J2N	2.4	FTSMHSTN	ST LOUIS	-	0	0
UUED 7ESU	CHANNEL on 6J2N	2.4	FTSMHSTN	ST LOUIS	-	0	0
Current Recurring Costs							$20,268
Recurring Costs of Multiplexing Action:							
Cost of 19.2 Kb/s Leased Circuit						($730)	($ 8,760)[8]
Cost of Local Leased Service (St. Louis area)						(151)	(1,812)[9]
Modem Maintenance Contracts						(14)	(168)[10]
Total Annual Savings Resulting from Multiplexing Action							$ 9,528
Nonrecurring Costs of Multiplexing Action:							
Installation of Circuits and Modems							($ 1,084)[8] [9] [10]
Modems (2 x 19.2 Kb/s 6-port stand-alone at $1,020 each = $2,040) (2 x 9.6 Kb/s local leased service at $525 each = $1,050)							(3,090)[10]
Total Savings in the First Year Resulting from Multiplexing Action							$ 5,354

See footnotes on next page.

Category 1. Table 1. Establish a New Trunk Through Multiplexing Army and Defense Mapping Agency Circuits

Footnotes:

1/ The costs of leased telecommunications services are paid by the Defense Commercial Communications Office (DECCO) to communications vendors. The costs shown on this schedule are the net costs to the Government.
2/ Command Communications Service Designator.
3/ Kilobits per second - the standard unit for measuring the rate of data transmission.
4/ Communications Service Authorization - identifies specific contract with vendor for each service.
5/ Fort Sam Houston, Texas.
6/ St. Louis, Missouri.
7/ This circuit was disconnected after our cutoff date, October 6, 1989, but could have been reconfigured as of our cutoff date. Therefore, no reconfiguration actions are required for this circuit; however, an opportunity to reduce expenditures was lost for the period before the circuit's disconnection.
8/ Cost estimate obtained at DECCO through a comparison of representative telecommunications vendors' cost estimates.
9/ Cost estimate obtained through the local exchange carrier.
10/ Cost data obtained at DECCO through the Codex Bulk Modem Purchase Catalog.

Category 1. Table 2. Establish a New Trunk Through Multiplexing Air Force and Defense Mapping Agency Circuits

CCSD [2]	Description	Kb/s [3]	From	To	CSA [4]	Leased Costs [1] Monthly Recurring Costs	Leased Costs [1] Annual Cost To DoD
NUED 7CDH	DATA CIRCUIT	2.4	FTSMHSTN[5]	SCOTT[6]	AT D 69289	$822	$ 9,864
JRPD 7E0L[7]	DATA CIRCUIT	9.6	RANDOLPH[8]	SCOTT	AMSC D 00878	750	9,000
Current Recurring Costs							$18,864
Recurring Costs of Multiplexing Actions:							
Cost of 2.4 Kb/s Leased Circuit (FTSMHSTN to RANDOLPH)						($207)	($ 2,484)[9]
Cost of 19.2 Kb/s Leased Circuit (RANDOLPH to SCOTT)						(730)	(8,760)[9]
Modem Maintenance Contracts						(14)	(168)[10]
Total Annual Savings Resulting from Multiplexing Actions							$ 7,452
Nonrecurring Costs of Multiplexing Actions:							
Installation of Circuits and Modems							($ 860)[9] [10]
Modems (2 x 2.4 Kb/s stand-alones at $709 each = $1,418)							
(2 x 19.2 Kb/s 6-port 2A modems at $1,020 each = $2,040)							(3,458)[10]
Total Savings in the First Year Resulting from Multiplexing Actions							$ 3,134

See footnotes on next page.

Category 1. Table 2. Establish a New Trunk Through Multiplexing Air Force and Defense Mapping Agency Circuits

Footnotes:

1/ The costs of leased telecommunications services are paid by the Defense Commercial Communications Office (DECCO) to communications vendors. The costs shown on this schedule are the net costs to the Government.
2/ Command Communications Service Designator.
3/ Kilobits per second - the standard unit for measuring the rate of data transmission.
4/ Communications Service Authorization - identifies specific contract with vendor for each service.
5/ Fort Sam Houston, Texas.
6/ Scott Air Force Base, Illinois.
7/ This circuit was disconnected after our cutoff date, October 6, 1989, but could have been reconfigured as of our cutoff date. Therefore, no reconfiguration actions are required for this circuit; however, an opportunity to reduce expenditures was lost for the period before the circuit's disconnection.
8/ Randolph Air Force Base, Texas.
9/ Cost estimate obtained at DECCO through a comparison of representative telecommunications vendors' cost estimates.
10/ Cost data obtained at DECCO through the Codex Bulk Modem Purchase Catalog.

Category 1. Table 3. Establish a New Trunk Through Multiplexing Defense Data Network (DDN) Access Circuits to the Nearest DDN Node

CCSD [2]	Description	Kb/s [3]	From	To	CSA [4]	Leased Costs [1] Monthly Recurring Costs	Leased Costs [1] Annual Cost To DoD
JUE9 72VK	DATA CIRCUIT	4.8	LAUGHLIN[5]	RANDOLPH[6]	ABI 36 Q 08760	$ 222	$ 2,664
					SW 36 D 0870	973	11,676
JUE9 75ZG	DATA CIRCUIT	19.2	LAUGHLIN	KELLY[7]	GTES D 31139 005	1,364	16,368
JUE9 75ZH	DATA CIRCUIT	9.6	LAUGHLIN	KELLY	GTES D 31139 006	1,200	14,400
JUE9 78EA	DATA CIRCUIT	9.6	LAUGHLIN	FTSMHSTN[8]	GTES D 31147 011	1,204	14,448
Current Recurring Costs							$59,556
Recurring Costs of Multiplexing Action:							
Cost of 56 Kb/s Leased Circuit (LAUGHLIN to KELLY DDN node)						($1,666)	($19,992)[9]
Equipment Maintenance Contracts						(24)	(288)[10]
Total Annual Savings Resulting from Multiplexing Action							$39,276
Nonrecurring Costs of Multiplexing Action:							
Installation of Circuit and Equipment							($ 1,684)[9]
Time Division Multiplexors with 6 Channels (2 x 1 circuit at $1,921 each)							(3,842)[10]
Total Savings in the First Year Resulting from Multiplexing Action							$33,750

See footnotes on next page.

Category 1. Table 3. Establish a New Trunk Through Multiplexing Defense Data Network (DDN) Access Circuits to the Nearest DDN Node

Footnotes:

1/ The costs of leased telecommunications services are paid by the Defense Commercial Communications Office (DECCO) to communications vendors. The costs shown on this schedule are the net costs to the Government.
2/ Command Communications Service Designator.
3/ Kilobits per second - the standard unit for measuring the rate of data transmission.
4/ Communications Service Authorization - identifies specific contract with vendor for each service.
5/ Laughlin Air Force Base, Texas.
6/ Randolph Air Force Base, Texas.
7/ Kelly Air Force Base, Texas.
8/ Fort Sam Houston, Texas.
9/ Cost estimate obtained at DECCO through a comparison of representative telecommunications vendors' cost estimates.
10/ Cost data obtained through the equipment catalogs of a representative vendor.

Category 1. Table 4. Establish a New Trunk Through Multiplexing Circuits at Brooks Air Force Base, Texas, Using Local Leased Service

CCSD [2]	Description	Kb/s [3]	From	To	CSA [4]	Leased Costs [1] Monthly Recurring Costs	Leased Costs [1] Annual Cost To DoD
JAKD 7BVY	DATA CIRCUIT	4.8	BROOKS [5]	RANDOLPH [6]	SW 05 D 03961	$425	$ 5,100
					PRDN OC Y 48268	18	216
JRPD 7GRP	DATA CIRCUIT	2.4	BROOKS	RANDOLPH	SW 35 D 00055	356	4,272
JAKM 7JTB	DATA CIRCUIT	9.6	BROOKS	RANDOLPH	AMSC D 01363 WU	738	8,856
JAKD 7JTT	DATA CIRCUIT	9.6	BROOKS	RANDOLPH	AMSC D 01362 WU	738	8,856
JRPD 7PNX	DATA CIRCUIT	1.2	BROOKS	RANDOLPH	ABI 05 Q 03992	91	1,092
					SW 05 D 03992	435	5,220
JAKD 7ZDK	DATA CIRCUIT	1.2	BROOKS	RANDOLPH	ABI 05 Q 03957	68	816
					SW 05 D 03957	143	1,716
Current Recurring Costs							$36,144
Recurring Costs of Multiplexing Action:							
Cost of 56 Kb/s Leased Circuit						($619)	($ 7,428) [7]
Equipment Maintenance Contracts						(36)	(432) [8] [9]
Total Annual Savings Resulting from Multiplexing Action							$28,284
Nonrecurring Costs of Multiplexing Action:							
Installation of Circuit and Equipment							($ 1,018) [7] [8] [9]
Time Division Multiplexors (2 circuits at $1,921 each)							(3,842) [8]
Modems (12 cards at $138 each)							(1,656) [9]
Total Savings in the First Year Resulting from Multiplexing Action							$21,768

See footnotes on next page.

Category 1. Table 4. Establish a New Trunk Through Multiplexing Circuits at Brooks Air Force Base, Texas, Using Local Leased Service

Footnotes:

1/ The costs of leased telecommunications services are paid by the Defense Commercial Communications Office (DECCO) to communications vendors. The costs shown on this schedule are the net costs to the Government.
2/ Command Communications Service Designator.
3/ Kilobits per second - the standard unit for measuring the rate of data transmission.
4/ Communications Service Authorization - identifies specific contract with vendor for each service.
5/ Brooks Air Force Base, Texas.
6/ Randolph Air Force Base, Texas.
7/ Cost estimate obtained through the local exchange carrier.
8/ Cost data obtained through the equipment catalogs of a representative vendor.
9/ Cost data obtained at DECCO through the Codex Bulk Modem Purchase Catalog.

Category 1. Table 5. Establish a New Trunk Through Multiplexing Circuits at Kelly Air Force Base, Texas, Using Local Leased Service

CCSD [2]	Description	Kb/s [3]	From	To	CSA [4]	Leased Costs [1] Monthly Recurring Costs	Leased Costs [1] Annual Cost To DoD
JRPD 7HBQ	DATA CIRCUIT	1.2	KELLY [5]	RANDOLPH [6]	ABI 05 Q 03965	$ 46	$ 552
					SW 05 D 03965	389	4,668
JRPD 7NCX	DATA CIRCUIT	9.6	KELLY	RANDOLPH	AMSC D 00737	328	3,936
					PRDNOC Y 48264	18	216
JAKD 7SKP	DATA CIRCUIT	1.2	KELLY	RANDOLPH	AMSC D 00928 WU	880	10,560
JAKD 7WQZ	DATA CIRCUIT	1.2	KELLY	RANDOLPH	AMSC D 01446 WU	377	4,524
JRPD 7XPP	DATA CIRCUIT	1.2	KELLY	RANDOLPH	ABI 05 Q 03996	68	816
					SW 05 D 03996	270	3,240
Current Recurring Costs							$28,512
Recurring Costs of Multiplexing Action:							
Cost of 19.2 Kb/s Leased Circuit						($466)	($ 5,592) [7]
Modem Maintenance Contracts						(16)	(192) [8]
Total Annual Savings Resulting from Multiplexing Action							$22,728
Nonrecurring Costs of Multiplexing Action:							
Installation of Circuit and Modems							($ 1,306) [7] [8]
Modems (2 x 19.2 Kb/s 6-port modem at $1,020 each = $2,040) (10 cards at $138 each = $1,380)							(3,420) [8]
Total Savings in the First Year Resulting from Multiplexing Action							$18,002

See footnotes on next page.

Category 1. Table 5. Establish a New Trunk Through Multiplexing Circuits at Kelly Air Force Base, Texas, Using Local Leased Service

Footnotes:

1/ The costs of leased telecommunications services are paid by the Defense Commercial Communications Office (DECCO) to communications vendors. The costs shown on this schedule are the net costs to the Government.
2/ Command Communications Service Designator.
3/ Kilobits per second - the standard unit for measuring the rate of data transmission.
4/ Communications Service Authorization - identifies specific contract with vendor for each service.
5/ Kelly Air Force Base, Texas.
6/ Randolph Air Force Base, Texas.
7/ Cost estimate obtained through the local exchange carrier.
8/ Cost data obtained at DECCO through the Codex Bulk Modem Purchase Catalog.

Category 1. Table 6. Establish a New Trunk Through Multiplexing Circuits at Lackland Air Force Base, Texas, Using Local Leased Service

CCSD [2]	Description	Kb/s [3]	From	To	CSA [4]	Leased Costs [1] Monthly Recurring Costs	Leased Costs [1] Annual Cost To DoD
JUED 7DTW	DATA CIRCUIT	4.8	LACKLAND [5]	RANDOLPH [6]	AMSC D 00707 WU	$ 630	$ 7,560
JRPM 7EPA	DATA CIRCUIT	19.2	LACKLAND	RANDOLPH	GTES D 10056	1,237	14,844
JRPD 7GYH	DATA CIRCUIT	1.2	LACKLAND	RANDOLPH	ABI 05 Q 03993	159	1,908
					SW 05 D 03993	279	3,348
JRPD 7KZG	DATA CIRCUIT	1.2	LACKLAND	RANDOLPH	AMSC D 01698	408	4,896
JRPD GD75	DATA CIRCUIT	2.4	LACKLAND	RANDOLPH	ABI 05 Q 03969	120	1,440
					SW 05 D 03969	270	3,240
Current Recurring Costs							$37,236
Recurring Costs of Multiplexing Action:							
Cost of 19.2 Kb/s Leased Circuit						($ 619)	($ 7,428) [7]
Modem Maintenance Contracts						(34)	(408) [8] [9]
Total Annual Savings Resulting from Multiplexing Action							$29,400
Nonrecurring Costs of Multiplexing Action:							
Installation of Circuit and Modems							($ 940) [7] [8] [9]
Time Division Multiplexors (2 at $1,921 each)							(3,842) [8]
Modems (10 cards at $138 each)							(1,380) [9]
Total Savings in the First Year Resulting from Multiplexing Action							$23,238

See footnotes on next page.

Category 1. Table 6. Establish a New Trunk Through Multiplexing Circuits at Lackland Air Force Base, Texas, Using Local Leased Services

Footnotes:

1/ The costs of leased telecommunications services are paid by the Defense Commercial Communications Office (DECCO) to communications vendors. The costs shown on this schedule are the net costs to the Government.
2/ Command Communications Service Designator.
3/ Kilobits per second - the standard unit for measuring the rate of data transmission.
4/ Communications Service Authorization - identifies specific contract with vendor for each service.
5/ Lackland Air Force Base, Texas.
6/ Randolph Air Force Base, Texas.
7/ Cost estimate obtained through the local exchange carrier.
8/ Cost data obtained through the equipment catalogs of a representative vendor.
9/ Cost data obtained at DECCO through the Codex Bulk Modem Purchase Catalog.

Category 1. Table 7. Establish a New Trunk Through Multiplexing Air Force and Defense Logistics Agency Circuits to the Austin, Texas, Area

CCSD [2]	Description	Kb/s [3]	From	To	CSA [4]	Leased Costs [1] Monthly Recurring Costs	Leased Costs [1] Annual Cost To DoD
NSUD 7A2G	DATA CIRCUIT	9.6	SANANTON[5]	AUSTIN[6]	AT D 998317	$479	$ 5,748
JRP9 72ZF	DDN[7] ACCESS CIRCUIT	9.6	BERGSTRM[8]	BROOKS[9]	GTES D 07530	721	8,652
JUE9 7556	DDN ACCESS CIRCUIT	9.6	BERGSTRM	RANDOLPH[10]	AMSC D 01029 WU	715	8,580
JUE9 774U	DDN ACCESS CIRCUIT	9.6	BERGSTRM	RANDOLPH	AMSC D 01212	611	7,332
JRPD 7JJN	DATA CIRCUIT	1.2	RANDOLPH	BERGSTRM	AT 30 D 00721	525	6,300
					ABI 30Q 00721 SW	57	684
JAKD 7CC5	DATA CIRCUIT	1.2	RANDOLPH	MABRY[11]	ABI D 67406	574	6,888
Current Recurring Costs							$44,184
Recurring Costs of Multiplexing Actions:							
Cost of 9.6 Kb/s Leased Circuit (SANANTON to RANDOLPH)						($300)	($ 3,600)[12]
Cost of 56 Kb/s Leased Circuit (RANDOLPH to BERGSTRM)						(907)	(10,884)[13]
Cost of 19.2 Kb/s Leased Circuit (BERGSTRM to AUSTIN)						(228)	(2,736)[13]
Cost of 2.4 Kb/s Leased Circuit (AUSTIN to MABRY-1.2 Kb/s not available)						(307)	(3,684)[13]
Equipment Maintenance Contracts						(34)	(408)[14] [15]
Total Annual Savings Resulting from Multiplexing Actions							$22,872
Nonrecurring Costs of Multiplexing Actions:							
Installation of Circuits and Equipment							($ 4,047)[12] [13] [14] [15]
Equipment (1 stand-alone, limited distance, at $190)							
(1 card, limited distance, at $138)							
(2 2160 muxes at $1,921 each = $3,842)							
(2 19.2 Kb/s stand-alone at $763 each = $1,526)							
(2 2.4 Kb/s stand-alone at $406 each = $ 812)							(6,508)[14] [15]
Total Savings in the First Year Resulting from Multiplexing Actions							$12,317

See footnotes on next page.

Category 1. Table 7. Establish a New Trunk Through Multiplexing Air Force and Defense Logistics Agency Circuits to the Austin, Texas, Area

Footnotes:

1/ The costs of leased telecommunications services are paid by the Defense Commercial Communications Office (DECCO) to communications vendors. The costs shown on this schedule are the net costs to the Government.
2/ Command Communications Service Designator.
3/ Kilobits per second - the standard unit for measuring the rate of data transmission.
4/ Communications Service Authorization - identifies specific contract with vendor for each service.
5/ San Antonio, Texas.
6/ Austin, Texas.
7/ Defense Data Network.
8/ Bergstrom Air Force Base, Texas.
9/ Brooks Air Force Base, Texas.
10/ Randolph Air Force Base, Texas.
11/ Camp Mabry, Texas.
12/ Cost estimate obtained through the local exchange carrier.
13/ Cost estimate obtained at DECCO through a comparison of representative telecommunications vendors' cost estimates.
14/ Cost data obtained at DECCO through the Codex Bulk Modem Purchase Catalog.
15/ Cost data obtained through the equipment catalogs of a representative vendor.

Category 1. Table 8. Establish a New Trunk Through Multiplexing Air Force Circuits to the Pensacola and Panama City, Florida, Areas

CCSD [2]	Description	Kb/s [3]	From	To	CSA [4]	Leased Costs [1] Monthly Recurring Costs	Leased Costs [1] Annual Cost To DoD
JAKM 7GV5	DATA TRUNK	19.2	RANDOLPH [5]	EGLIN [6]	GTES D 39913	$1,883	$22,596
					CODX OC Y 48180	1,066	12,792
JRPD 7PVY	DATA CIRCUIT	1.2	RANDOLPH	TYNDALL [7]	AMSC D 01162 001	463	5,556
Current Recurring Costs							$40,944
Recurring Costs of Multiplexing Actions:							
Cost of 56 Kb/s Leased Circuit (RANDOLPH to EGLIN)						($1,928)	($23,136) [8]
Cost of 2.4 Kb/s Leased Circuit (EGLIN to TYNDALL-1.2 Kb/s not available)						(463)	(5,556) [8]
Equipment Maintenance Contracts						(30)	(360) [9] [10]
Total Annual Savings Resulting from Multiplexing Actions							$11,892
Nonrecurring Costs of Multiplexing Actions:							
Installation of Circuits and Equipment							($ 2,592) [8] [9] [10]
Time Division Multiplexors (2 at $1,921 each)							(3,842) [10]
Modems (2 2.4 kb/s stand-alones at $406 each)							(812) [9]
Total Savings in the First Year Resulting from Multiplexing Action							$ 4,646

See footnotes on next page.

Category 1. Table 8. Establish a New Trunk Through Multiplexing Air Force Circuits to the Pensacola and Panama City, Florida, Areas

Footnotes:

1/ The costs of leased telecommunications services are paid by the Defense Commercial Communications Office (DECCO) to communications vendors. The costs shown on this schedule are the net costs to the Government.
2/ Command Communications Service Designator.
3/ Kilobits per second - the standard unit for measuring the rate of data transmission.
4/ Communications Service Authorization - identifies specific contract with vendor for each service.
5/ Randolph Air Force Base, Texas.
6/ Eglin Air Force Base, Florida.
7/ Tyndall Air Force Base, Florida.
8/ Cost estimate obtained at DECCO through a comparison of representative telecommunications vendors' cost estimates.
9/ Cost data obtained at DECCO through the Codex Bulk Modem Purchase Catalog.
10/ Cost data obtained through the equipment catalogs of representative vendor.

Category 1. Table 9. Establish a New Trunk Through Multiplexing Air Force Circuits to the Salt Lake City, Utah, Area

CCSD[2]	Description	Kb/s[3]	From	To	CSA[4]	Leased Costs[1] Monthly Recurring Costs	Leased Costs[1] Annual Cost To DoD
JTNX 6G44	DATA TRUNK	9.6	KELLY[5]	HILL[6]	ABI Q 50165	$780	$ 9,360
JZQD 7F8E	DATA CIRCUIT	9.6	KELLY	HILL	AT D 35497	909	10,908
Current Recurring Costs							$20,268
Recurring Costs of Multiplexing Action:							
Cost of 19.2 Kb/s Leased Circuit						($965)	($11,580)[7]
Modem Maintenance Contracts (2 modems at $3 each)						(6)	(72)[8]
Total Annual Savings Resulting from Multiplexing Action							$ 8,616
Nonrecurring Costs of Multiplexing Action:							
Installation of Circuit and Modems							($ 817)[7] [8]
Modems (2 modems at $1,020 each)							(2,040)[8]
Total Savings in the First Year Resulting from Multiplexing Action							$ 5,759

See footnotes on next page.

Category 1. Table 9. Establish a New Trunk Through Multiplexing Air Force Circuits to the Salt Lake City, Utah, Area

Footnotes:

1/ The costs of leased telecommunications services are paid by the Defense Commercial Communications Office (DECCO) to communications vendors. The costs shown on this schedule are the net costs to the Government.
2/ Command Communications Service Designator.
3/ Kilobits per second - the standard unit for measuring the rate of data transmission.
4/ Communications Service Authorization - identifies specific contract with vendor for each service.
5/ Kelly Air Force Base, Texas.
6/ Hill Air Force Base, Utah.
7/ Cost estimate obtained at DECCO through a comparison of representative telecommunications vendors' cost estimates.
8/ Cost data obtained at DECCO through the Codex Bulk Modem Purchase Catalog.

Category 1. Table 10. Establish a New Trunk Through Multiplexing Air Force Circuits to the Colorado Springs, Colorado, Area

CCSD [2]	Description	Kb/s [3]	From	To	CSA [4]	Leased Costs [1] Monthly Recurring Costs	Leased Costs [1] Annual Cost To DoD
JYED 2AFW	DATA CIRCUIT	4.8	CHYNNMTN[5]	LACKLAND[6]	AMSC D 00993	$890	$10,680
JT1X 6H8L	DATA CIRCUIT	9.6	RANDOLPH[7]	CHYNNMTN	AT D 31616	812	9,744
Current Recurring Costs							$20,424
Recurring Costs of Multiplexing Actions:							
Cost of 4.8 Kb/s Leased Circuit (LACKLAND to RANDOLPH)						($345)	($ 4,140)[8]
Cost of 19.2 Kb/s Leased Circuit (RANDOLPH to CHYNNMTN)						(766)	(9,192)[8]
Modem Maintenance Contracts (2 modems at $4 each)						(8)	(96)[9]
(2 modems at $3 each)						(6)	(72)[9]
Total Annual Savings Resulting from Multiplexing Actions							$ 6,924
Nonrecurring Costs of Multiplexing Actions:							
Installation of Circuits and Modems							($ 1,796)[8] [9]
Modems (2 4.8 kb/s stand-alones at $709 each = $1,418)							
(2 19.2 kb/s stand-alones, 6-port modems at $1,020 each = $2,040)							(3,458)[9]
Total Savings in the First Year Resulting from Multiplexing Actions							$ 1,670

See footnotes on next page.

Category 1. Table 10. Establish a New Trunk Through Multiplexing Air Force Circuits to the Colorado Springs, Colorado, Area

Footnotes:

1/ The costs of leased telecommunications services are paid by the Defense Commercial Communications Office (DECCO) to communications vendors. The costs shown on this schedule are the net costs to the Government.
2/ Command Communications Service Designator.
3/ Kilobits per second - the standard unit for measuring the rate of data transmission.
4/ Communications Service Authorization - identifies specific contract with vendor for each service.
5/ Cheyenne Mountain Complex, Colorado.
6/ Lackland Air Force Base, Texas.
7/ Randolph Air Force Base, Texas.
8/ Cost estimate obtained at DECCO through a comparison of representative telecommunications vendors' cost estimates.
9/ Cost data obtained at DECCO through the Codex Bulk Modem Purchase Catalog.

Category 1. Table 11. Establish a New Trunk Through Multiplexing Circuits at Air Force Military Entrance Processing Station

CCSD [2]	Description	Kb/s [3]	From	To	CSA [4]	Leased Costs [1] Monthly Recurring Costs	Leased Costs [1] Annual Cost To DoD
JRPD 7EX4 [5]	DATA CIRCUIT	2.4	RANDOLPH [6]	ST LOUIS [7]	AT D 38971 002	$702	$ 8,424
JRPD 7FM3 [5]	DATA CIRCUIT	2.4	RANDOLPH	ST LOUIS	AT D 38971 003	552	6,624
Current Recurring Costs							$15,048
Recurring Costs of Multiplexing Action:							
Cost of 4.8 Kb/s Leased Circuit KANSAS CITY to ST LOUIS						($739)	($ 8,868) [8]
Modem Maintenance Contracts (2 modems at $4 each)						(8)	(96) [9]
Total Annual Savings Resulting from Multiplexing Action							$ 6,084
Nonrecurring Costs of Multiplexing Action:							
Installation of Circuit and Modems							($ 1,730) [8] [9]
Modems (2 4-port modems at $843 each)							(1,686) [9]
Total Savings in the First Year Resulting from Multiplexing Action							$ 2,668

See footnotes on next page.

Category 1. Table 11. Establish a New Trunk Through Multiplexing Circuits at Air Force Military Entrance Processing Station

Footnotes:

1/ The costs of leased telecommunications services are paid by the Defense Commercial Communications Office (DECCO) to communications vendors. The costs shown on this schedule are the net costs to the Government.
2/ Command Communications Service Designator.
3/ Kilobits per second - the standard unit for measuring the rate of data transmission.
4/ Communications Service Authorization - identifies specific contract with vendor for each service.
5/ This circuit travels on a trunk from Randolph Air Force Base, Texas to Kansas City, Missouri.
6/ Randolph Air Force Base, Texas.
7/ St. Louis, Missouri.
8/ Cost estimate obtained at DECCO through a comparison of representative telecommunications vendors' cost estimates.
9/ Cost data obtained at DECCO through the Codex Bulk Modem Purchase Catalog.

Category 1. Table 12. Establish a New Trunk Through Multiplexing Multiple Air Force Activities' Circuits

CCSD [2]	Description	Kb/s [3]	From	To	CSA [4]	Leased Costs [1] Monthly Recurring Costs	Leased Costs [1] Annual Cost To DoD
JTNX 6J1S	DATA CIRCUIT	9.6	RANDOLPH[5]	KIRTLAND[6]	AT D 38953	$ 704	$ 8,448
JZQD 7DVK	DATA CIRCUIT	9.6	KELLY[7]	KIRTLAND	AT D 10384	675	8,100
JRPD 7FB4	CHANNEL on 6J1S	2.4	RANDOLPH	AMARILLO[8]	AT D 38953 003	956	11,472
JRPD 7ECX	CHANNEL on 6J1S	2.4	RANDOLPH	FT DOUGLAS[9]	AT D 38953 001	809	9,708
JZQD 7YDD	DATA CIRCUIT	9.6	KELLY	KIRTLAND	ABI D 87846	1,221	14,652
JT1X 6N8V	DATA CIRCUIT	19.2	RANDOLPH	KIRTLAND	GTES D 39904	2,819	33,828
JRPD 7FB3	CHANNEL on 6J1S	2.4	RANDOLPH	ALBUQUER[10]	-	0	0
JRPD 7JZB	CHANNEL on 6N8V	1.2	RANDOLPH	KIRTLAND	-	0	0
Current Recurring Costs							$86,208
Recurring Costs of Multiplexing Actions:							
Cost of 19.2 Kb/s Leased Circuit KELLY to RANDOLPH (JZQD 7DVK, JZQD 7YDD)						($ 466)	($ 5,592)[11]
56 Kb/s Leased Circuit RANDOLPH to KIRTLAND (JTNX 6J1S, JZQD 7DVK, JZQD 7YDD, JT1X 6N8V)						(844)	(10,128)[12]
9.6 Kb/s Leased Circuit KIRTLAND to ALBUQUER (JTNX 6J1S)						(161)	(1,932)[12]
2.4 Kb/s Leased Circuit ALBUQUER to EL PASO[13] (JRPD 7FB4)						(625)	(7,500)[12]
2.4 Kb/s Leased Circuit EL PASO to AMARILLO (JRPD 7FB4)						(698)	(8,376)[12]
2.4 Kb/s Leased Circuit ALBUQUER to FT DOUGLAS (JRPD 7ECX)						(757)	(9,084)[12]
Equipment Maintenance Contracts						(46)	(552)[14] [15]
Total Annual Savings Resulting from Multiplexing Actions							$43,044
Nonrecurring Costs of Multiplexing Actions:							
Equipment							($ 6,934)[14] [15]
Installation of Circuits and Equipment							(8,947)[11] [12] [14] [15]
Total Savings in the First Year Resulting from Multiplexing Actions							$27,163

See footnotes on next page.

Category 1. Table 12. Establish a New Trunk Through Multiplexing Multiple Air Force Activities' Circuits

Footnotes:

1/ The costs of leased telecommunications services are paid by the Defense Commercial Communications Office (DECCO) to communications vendors. The costs shown on this schedule are the net costs to the Government.
2/ Command Communications Service Designator.
3/ Kilobits per second - the standard unit for measuring the rate of data transmission.
4/ Communications Service Authorization - identifies specific contract with vendor for each service.
5/ Randolph Air Force Base, Texas.
6/ Kirtland Air Force Base, New Mexico.
7/ Kelly Air Force Base, Texas.
8/ Amarillo, Texas.
9/ Fort Douglas, Utah.
10/ Albuquerque, New Mexico.
11/ Cost estimate obtained through the local exchange carrier.
12/ Cost estimate obtained at DECCO through a comparison of representative telecommunications vendors' cost estimates.
13/ El Paso, Texas.
14/ Cost data obtained at DECCO through the Codex Bulk Modem Purchase Catalog.
15/ Cost data obtained through the equipment catalogs of a representative vendor.

Category 2. Table 1. Establish a New Routing Through the Defense Data Network (DDN)

CCSD [2]	Description	Kb/s [3]	From	To	CSA [4]	Leased Costs [1] Monthly Recurring Costs	Leased Costs [1] Annual Cost To DoD
JAKD 7H6F	DATA CIRCUIT	9.6	SANANTON[5]	COLOSPRGS[6]	GTES D 99216	$1,120	$ 13,440
JAKD 7H6G	DATA CIRCUIT	9.6	SANANTON	COLOSPRGS	GTES D 99217	1,120	13,440
JAKD 7H6H	DATA CIRCUIT	9.6	SANANTON	FTCARSON[7]	ABI D 99222	1,329	15,948
JAKD 7H6J	DATA CIRCUIT	9.6	SANANTON	PETERSON[8]	ABI D 99223	1,458	17,496
JAKD 7H6K	DATA CIRCUIT	9.6	SANANTON	USAFACDM[9]	ABI D 99224	1,338	16,056
JAKD 7ZTN[10]	CHANNEL on 6G0E	1.2	SANANTON	SCOTT[11]	-	0	0
JAKD 7BT6	DATA CIRCUIT	9.6	SANANTON	HILL[12]	ABI D 01379	1,407	16,884
JAKM 7CJM[10]	DATA CIRCUIT	56.0	SANANTON	SCOTT	AMSC W 07500 167	3,225	38,700
JAKM 7JHN[13]	DATA TRUNK	9.6	SANANTON	RANDOLPH[14]	GTES 35W 10081	1,143	13,716
JAK9 74J1	DDN ACCESS	56.0	SANANTON	RANDOLPH	GTES D 31154 002	541	6,492
JAK9 7813	DDN ACCESS	56.0	SANANTON	RANDOLPH	GTES D 07552 002	581	6,972
JTDD 7BY0	DATA CIRCUIT	2.4	SANANTON	LNGLYAFB[15]	AMSC D 00759	328	3,936
JT1X 6G0E[10]	DATA TRUNK	9.6	SANANTON	SCOTT	AMSC D 00639 WU	1,300	15,600
Current Recurring Costs							$178,680
Recurring Costs of Multiplexing Action:							
Cost of a T-1[16] Leased Circuit (SANANTON to RANDOLPH)						($1,797)	($ 21,564)[17]
Cost of 9 9.6 Kb/s Leased Circuits[18] (at termination point)						(1,263)	(15,156)[19]
Equipment Maintenance Contracts							
Digital Multiplexer at $130							
Modems (13 lines at $1 each)						(143)	(1,716)[20] [21]
Total Annual Savings Resulting from Reconfiguration Action							$140,244
Nonrecurring Costs of Multiplexing Action:							
3-Card Nest Kit at $299 each ($897 x 2 termination points = $1,794)							
3 Cards at $1,757 each x 2 termination points = $10,542							($ 12,336)[20]
Modems (13 at $190 each = $2,470)							
Modems (13 at $138 each = $1,794)							(4,264)[21]
Installation of Circuits and Equipment							(6,188)[17] [19] [20] [21]
Total Savings in the First Year Resulting from Multiplexing Action							$117,456

See footnotes on next page.

Category 2. Table 1. Establish a New Routing Through the Defense Data Network (DDN)

Footnotes:

1/ The costs of leased telecommunications services are paid by the Defense Commercial Communications Office (DECCO) to communications vendors. The costs shown on this schedule are the net costs to the Government.
2/ Command Communications Service Designator.
3/ Kilobits per second - the standard unit for measuring the rate of data transmission.
4/ Communications Service Authorization - identifies specific contract with vendor for each service.
5/ Computer Services Center, San Antonio, Texas.
6/ Colorado Springs, Colorado.
7/ Fort Carson, Colorado.
8/ Peterson Air Force Base, Colorado.
9/ U.S. Air Force Academy, Colorado.
10/ This circuit was disconnected after our cutoff date, October 6, 1989, but could have been reconfigured as of our cutoff date. Therefore, no reconfiguration actions are required for this circuit; however, an opportunity to reduce expenditures was lost for the period before the circuit's disconnection.
11/ Scott Air Force Base, Illinois.
12/ Hill Air Force Base, Utah.
13/ This circuit was utilized at a modulation rate of 19.2 Kb/s rather than at the leased modulation rate of 56 Kb/s. This circuit, however, was disconnected after our cutoff date, October 6, 1989, but could have been reconfigured as of our cutoff date. Therefore, no reconfiguration actions are required for this circuit; however, an opportunity to reduce expenditures was lost for the period before the circuit's disconnection.
14/ Randolph Air Force Base, Texas.
15/ Langley Air Force Base, Virginia.
16/ A 1.544 million bits per second, high-speed circuit.
17/ Cost estimate obtained through the local exchange carrier.
18/ These four access circuits (JAKD 7H6F, JAKD 7H6G, JAKD 7H6H, JAKD 7H6K) are necessary because there is no DDN node at the circuits' termination points.
19/ Cost estimate obtained at DECCO through a comparison of representative telecommunications vendors' cost estimates.
20/ Cost data obtained through the equipment catalogs of a representative vendor.
21/ Cost data obtained at DECCO through the Codex Bulk Modem Purchase Catalog.

Category 2. Table 2. Establish a New Routing Through the Defense Switched Network (DSN)

CCSD 2/	Description	KH 3/	From	To	CSA 4/	Leased Costs 1/ Monthly Recurring Costs	Leased Costs 1/ Annual Cost To DoD
UUBV 7KHK	VOICE CIRCUIT	3	FTSMHSTN 5/	BRYAN 6/	AT P 995849	$739	$ 8,868
UUBV 7KHN	VOICE CIRCUIT	3	FTSMHSTN	BRYAN	AT P 995850	760	9,120
Current Recurring Costs							$17,988
Recurring Costs of Reconfiguration Action: Total Cost of Vendor Price Estimates ($6,516 annually per circuit x 2)							($13,032) 7/
Total Annual Savings Resulting from Reconfiguration Action							$ 4,956
Nonrecurring Cost of Reconfiguration Action: Installation of Circuits							($ 2,558) 7/
Total Savings in the First Year Resulting from Reconfiguration Action							$ 2,398

Footnotes:

1/ The costs of leased telecommunications services are paid by the Defense Commercial Communications Office (DECCO) to communications vendors. The costs shown on this schedule are the net costs to the Government.
2/ Command Communications Service Designator.
3/ Kilohertz - a unit of frequency equal to 1,000 cycles per second.
4/ Communications Service Authorization - identifies specific contract with vendor for each service.
5/ Fort Sam Houston, Texas.
6/ Bryan, Texas.
7/ Cost estimates obtained at DECCO through a comparison of representative telecommunications vendors' cost estimates.

Category 3. Rehome Defense Data Network Access Circuits

	Current Configuration						Leased Costs[1]	
CCSD[4]	CSA[5]	Host[2] Administrator Unit	Host Location	Current Node[3] Location	Kbs[6]	Proposed Node Location	Monthly Recurring Costs	Annual Cost To DoD
Air Force								
JZQ9 72E0	ABI 35Q 00028 SW	MDV/TCG[7]	KELLY[8]	BROOKS[9]	2.4	KELLY	$233	$ 2,796
	SW 35D 00028 ABI						253	3,036
JZQ9 72EY	ABI 35Q 00026 SW	MM(DOM)[10]	KELLY	BROOKS	2.4	KELLY	170	2,040
	SW 35D 00026 ABI						253	3,036
JZQ9 72EZ	ABI 35Q 00027 SW	FDPO/FMS[11]	KELLY	BROOKS	2.4	KELLY	170	2,040
	SW 35D 00027 ABI						254	3,048
JRP9 730L	ABI D 07530 005	3700 PRG/DPMD[12]	LACKLAND[13]	BROOKS	9.6	LACKLAND	660	7,920
JUE9 75Q4	ABI D 31139 002	HQAFCOMS[14]	LACKLAND	KELLY	9.6	LACKLAND	627	7,524
JUE9 75ZJ	GTES D 31139 003	1921 CS[15]	LACKLAND	KELLY	9.6	LACKLAND	528	6,336
JZQ9 753J	GTES D 07530 008	ALC/MMEC[16]	KELLY	BROOKS	19.2	KELLY	734	8,808
JUE9 7555	GTES D 07551 002	USAF CLINIC[17]	KELLY	RANDOLPH[18]	9.6	KELLY	513	6,156
JUE9 76YT	GTES D 31147 003	AFCOMS D804[19]	BROOKS	FTSMHSTN[20]	9.6	BROOKS	406	4,872
JUE9 77FR	GTES35D 10086	AFRTS/AFBS[21]	KELLY	FTSMHSTN	9.6	KELLY	416	4,992
JUE9 7837	ABI W 07530 013	AFLC[22]	KELLY	BROOKS	56.0	KELLY	606	7,272
Army								
UAS9 72JH	ABI 35Q 00032 SW	HQ 5RB USARC[23]	FTSMHSTN	BROOKS	9.6	FTSMHSTN	376	4,512
	SW 35D 00032 ABI						253	3,036
URE9 72ZZ[24]	GTES31D 15056	RCAS/DARMS[25]	FTSMHSTN	RANDOLPH	4.8	FTSMHSTN	393	4,716
US29 754D	GTES D 31101 001	DLIELC[26]	LACKLAND	RANDOLPH	9.6	LACKLAND	523	6,276
Annual Savings for Termination of all Contracts								$88,416
Recurring Costs of Rehoming Actions: Modem Maintenance Contracts								($ 228)[27]
Annual Savings Resulting from Rehoming Actions								$88,188

See footnotes at end of chart.

Category 3. Rehome Defense Data Network Access Circuits

	Annual Cost To DoD
Total Annual Savings Resulting from Rehoming Actions (cont'd)	$88,188
Nonrecurring Costs of Rehoming Actions:	
Modem Cards[27] (13 circuits at $138 per card)	($ 1,794)
(1 56 Kb/s circuit at $371 per card)	(371)
Stand-alone Modems[27] (13 circuits at $190 per modem)	(2,470)
(1 56 Kb/s circuit at $435 per modem)	(435)
Modem Installation[27] (2 modems at $39 each x 13 circuits)	(1,014)
(2 modems at $56 each x 1 56 Kb/s circuit)	(112)
Total Savings in the First Year Resulting from Rehoming Actions[28]	$81,992

Footnotes:

1/ The costs of leased telecommunications services are paid by the Defense Commercial Communications Office (DECCO) to communications vendors. The costs shown on this schedule are the net costs to the Government.
2/ The computer or network that is linked into the Defense Data Network (DDN) via the circuit.
3/ The standard point of access for DDN, where users are connected into the network.
4/ Command Communications Service Designator.
5/ Communications Service Authorization - identifies specific contract with vendor for each service.
6/ Kilobits per second - the standard unit for measuring the rate of data transmission.
7/ Kelly Air Force Base Material Management Division V/Technical Control Group.
8/ Kelly Air Force Base, Texas.
9/ Brooks Air Force Base, Texas.
10/ Kelly Air Force Base Material Management (Directorate of Material).
11/ Foreign Disclosure Policy Office/Foreign Military Sales.
12/ 3700th Program Resources Group/Data Processing Management Division.
13/ Lackland Air Force Base, Texas.
14/ Headquarters, Air Force Commissary Service.
15/ 1921st Communications Squadron.
16/ Air Logistics Command/Material Management, Engineering, Computers.
17/ U.S. Air Force Clinic, Kelly Air Force Base.
18/ Randolph Air Force Base, Texas.
19/ Air Force Commissary Service, Detachment 804.

Category 3. Rehome Defense Data Network Access Circuits

Footnotes (cont'd):

20/ Fort Sam Houston, Texas.
21/ Armed Forces Radio and Television Services/Air Force Broadcasting Service.
22/ Air Force Logistics Command.
23/ Headquarters, 5th Recruiting Brigade/U.S. Army Recruiting Command.
24/ This circuit was disconnected after our cutoff date, October 6, 1989, but could have been reconfigured as of our cutoff date. Therefore, no reconfiguration actions are required for this circuit; however, an opportunity to reduce expenditures was lost for the period before the circuit's disconnection.
25/ Reserve Component Automation System/Developmental Army Readiness and Mobilization System.
26/ Defense Language Institute English Language College.
27/ Cost data obtained at DECCO through the Codex Bulk Modem Purchase Catalog.
28/ Actual equipment requirements; DDN charges, if required, for connection to a node; and contract termination fees must be determined for final verification of total cost savings figure.

Category 4. Establish a Dial-up Connection and Disconnect the Associated Dedicated Circuit

CCSD[2]	Description	Kb/s[3]	From	To	CSA[4]	Leased Costs[1] Monthly Recurring Costs	Leased Costs[1] Annual Cost To DoD
UWJD 24JS	WWMCCS[5] DATA CIRCUIT	2.4	FTSMHSTN[6]	FTHUACH[7]	AT D 11347	$ 835	$10,020
UWJD 24JU	WWMCCS DATA CIRCUIT	2.4	FTSMHSTN	FT BLISS[8]	AT D 11348	635	7,620
					CODX OC Y 45106 M01	28	336
UWJD 26F3	WWMCCS DATA CIRCUIT	2.4	FTSMHSTN	FTLNRDW[9]	AT D 13279	910	10,920
URED 7WXA	DATA CIRCUIT	2.4	FTSMHSTN	ST LOUIS[10]	ABI D 22664	1,974	23,688
URED 7YFP	DATA CIRCUIT	2.4	FTSMHSTN	FT BLISS	ABI D 22667	2,855	34,260

Current Recurring Costs		$86,844
Recurring Costs of Reconfiguration Actions:		
Cost of Local Telephone Access	($ 148)	($ 1,776)[11]
Long-distance Toll Charges (1,404 minutes x $0.25)	(351)	(4,212)[12]
Maintenance Contracts (4 dial modems x $4)	(16)	(192)[13]
(3 STU IIIs x $100 per year)	(25)	(300)[13]
Total Annual Savings Resulting from Reconfiguration Actions:		$80,364
Nonrecurring Costs of Reconfiguration Actions		
Installation of Local Telephone Access		($ 620)[11]
Installation of Modems		(192)[13]
Maintenance of Modems		(316)[13]
Purchase Cost of Modems		(2,100)[13]
Purchase of STU IIIs		(9,600)
Total Savings in First Year Resulting from Reconfiguration Actions		$67,536

See footnotes on next page.

Category 4. Establish a Dial-up Connection and Disconnect the Associated Dedicated Circuit

Footnotes:

1/ The costs of leased telecommunications services are paid by the Defense Commercial Communications Office (DECCO) to communications vendors. The costs shown on this schedule are the net costs to the Government.
2/ Command Communications Service Designator.
3/ Kilobits per second - the standard unit for measuring the rate of data transmission.
4/ Communications Service Authorization - identifies specific contract with vendor for each service.
5/ Worldwide Military Command and Control System.
6/ Fort Sam Houston, Texas.
7/ Fort Huachuca, Arizona.
8/ Fort Bliss, Texas.
9/ Fort Leonard Wood, Missouri.
10/ St. Louis, Missouri.
11/ Cost data obtained from local telephone carrier customer service department.
12/ Toll charge obtained from long-distance telephone carrier customer service department. The minutes shown represent the monthly use of the four circuits listed, as determined by the circuit users.
13/ Cost data obtained at DECCO through the Codex Bulk Modem Purchase Catalog.

Category 5. Purchase Leased Modems

CCSD [2]	Description	Kb/s [3]	From	To	CSA [4]	Leased Costs [1] Monthly Recurring Costs	Leased Costs [1] Annual Cost To DoD
JAKM A293	DATA TRUNK	9.6	SANANTON[5]	WHEELER[6]	ABI D 99199	$288	$3,456
JQAD 7UFH	DATA CIRCUIT	2.4	ALTUS[7]	RANDOLPH[8]	AMSC D 16249 WU	166	1,992
Current Recurring Costs							$5,448
Recurring Costs of Modem Purchase Action:							
Modem Maintenance Contracts (2 modems at $3 each)						($ 6)	($ 72)[9]
(2 modems at $1 each)						(2)	(24)[9]
Total Annual Savings Resulting from Purchase Action							$5,352
Nonrecurring Costs of Modem Purchase Action:							
Modems for 2.4 Kb/s Circuit (2 modems at $709 each)							($1,418)[9]
for 9.6 Kb/s Circuit (2 modems at $406 each)							(812)[9]
Installation of Modems (4 modems x $56)							(224)[9]
Total Savings in the First Year Resulting from Modem Purchase Action							$2,898

See footnotes on next page.

Category 5. Purchase Leased Modems

Footnotes:

1/ The costs of leased modems are paid by the Defense Commercial Communications Office (DECCO) to communications vendors. The costs shown on this schedule are the net costs to the Government.
2/ Command Communications Service Designator.
3/ Kilobits per second - the standard unit for measuring the rate of data transmission.
4/ Communications Service Authorization - identifies specific contract with vendor for each service.
5/ San Antonio, Texas.
6/ Wheeler Air Force Base, Hawaii.
7/ Altus Air Force Base, Oklahoma.
8/ Randolph Air Force Base, Texas.
9/ Cost data obtained at DECCO through the Codex Bulk Modem Purchase Catalog.

Summary of Circuits Recommended for Reconfiguration.

	CIRCUIT[1] COUNT	ANNUAL[2] RECURRING COST	RECURRING COST OF[3] RECONFIGURATION ACTION	ANNUAL[4] RECURRING SAVINGS
Multiplexing[5]	48	$427,656	$191,556	$236,100
Rehome Special-Purpose Circuits To a General-Purpose Network[6]	15	196,668	51,468	145,200
Rehome Special-Purpose Access Circuits Within a General-Purpose Network[7]	14	88,416	228	88,188
Establish Dial-Up Service[8]	5	86,844	6,480	80,364
Purchase Leased Equipment[9]	2	5,448	96	5,352
Totals	84	$805,032	$249,828	$555,204

Footnotes:

1/ The number of circuits recommended for reconfiguration.
2/ The costs of leased telecommunications services are paid by the Defense Commercial Communications Office to communications vendors. The costs shown on this schedule are net costs to the Government.
3/ The recurring cost to complete the reconfiguration action.
4/ The annual recurring savings resulting from the reconfiguration action.
5/ See Category 1 (Tables 1-12).
6/ See Category 2 (Tables 1-2).
7/ See Category 3
8/ See Category 4
9/ See Category 5

Appendix D. Schedule of Circuits and Payments Recommended for Termination

CCSD [2]	Description	From	To	CSA [3]	Leased Costs [1] Monthly Recurring Costs	Leased Costs [1] Annual Cost To DoD
JRPD 7DS6	DATA CIRCUIT	RANDOLPH[4]	USAFACDM[5]	AMSC D 01075 WU	$380	$ 4,560
JAKD 7GXZ	DATA CIRCUIT	RANDOLPH	GUNTER[6]	AMSC D 01169 WU	100	1,200
JUE9 75Q3	DDN[7] ACCESS CIRCUIT	LACKLAND[8]	KELLY[9]	ABI D 31139 001	712	8,544
JAK9 74J4	DDN ACCESS CIRCUIT	SANANTON[10]	BROOKS[11]	GTES D 31154 002	392	4,704
JZQ9 76Y4	DDN ACCESS CIRCUIT	KELLY	FTSMHSTN[12]	ABI W 31147 006	527	6,324
JAKD 7B4S	DATA EQUIPMENT	LACKLAND	SANANTON	PRDNOCY 48237	18	216
JAKD 7BOH	CHANNEL on 6H5L[13]	SCOTT[14]	RANDOLPH	AMSC D 00894 WU	0	0
JAKD 7BS3	CHANNEL on 6H5L	SCOTT	RANDOLPH	AMSC D 00894 WU	0	0
Total Annual Savings Resulting From Termination Action						$25,548

Footnotes:

1/ The costs of leased telecommunications services are paid by the Defense Commercial Communications Office (DECCO) to communications vendors. The costs shown on this schedule are the net costs to the Government.

2/ Command Communications Service Designator.

3/ Communications Service Authorization - identifies specific contract with vendor for each service.

4/ Randolph Air Force Base, Texas.

5/ United States Air Force Academy, Colorado.

6/ Gunter Air Force Base, Alabama.

7/ Defense Data Network.

8/ Lackland Air Force Base, Texas.

9/ Kelly Air Force Base, Texas.

10/ San Antonio, Texas.

11/ Brooks Air Force Base, Texas.

12/ Fort Sam Houston, Texas.

13/ The two channels on this trunk, JT1X 6H5L, were not in service. Telecommunications Service Requests for disconnection should be issued for these channels to delete them from the data base (see Recommendation 2.).

14/ Scott Air Force Base, Illinois.

Appendix E. Schedule of Non-Sample Circuit Recommended for Termination

CCSD [2]	Description	From	To	CSA [3]	Leased Costs [1] Monthly Recurring Costs	Leased Costs [1] Annual Cost To DoD
JAKD 7DJA[4]	DATA CIRCUIT	MABRY[5]	BERGSTRM[6]	SW 35 D 33	$188	$2,256
Total Annual Savings Resulting From Termination Action						$2,256

Footnotes:

1/ The costs of leased telecommunications services are paid by the Defense Commercial Communications Office (DECCO) to communications vendors. The costs shown on this schedule are the net costs to the Government.

2/ Command Communications Service Designator.

3/ Communications Service Authorization - identifies specific contract with vendor for each service.

4/ This circuit was identified during our audit work in the San Antonio area. Because this circuit was not part of our audit sample, savings for it are projected separately for the Future Years Defense Program and are not included in the statistical projection of our audit results for the San Antonio area.

5/ Camp Mabry, Texas.

6/ Bergstrom Air Force Base, Texas.

Appendix F. Summary Schedule of Circuits Recommended for Reconfiguration and Termination

	CIRCUIT COUNT 1/	ANNUAL RECURRING COST 2/	RECURRING COST OF RECONFIGURATION ACTION 3/	ANNUAL RECURRING SAVINGS 4/
Sample Circuits Recommended for Reconfiguration 5/	84	$805,032	$249,828	$555,204
Sample Circuits Recommended for Termination 6/	8	25,548	0	25,548
Total	92	$830,580	$249,828	$580,752
Non-Sample Circuit Recommended for Termination 7/	1	2,256	0	2,256
Total	1	$ 2,256	$ 0	$ 2,256

Footnotes:

1/ The number of circuits recommended for reconfiguration or termination.

2/ The costs of leased telecommunications services are paid by the Defense Commercial Communications Office to communications vendors. The costs shown on this schedule are net costs to the Government.

3/ The recurring cost to complete the reconfiguration or termination action.

4/ The annual recurring savings resulting from the reconfiguration or termination action.

5/ See Appendix C.

6/ See Appendix D.

7/ See Appendix E.

Appendix G. Schedule of Future Years Defense Program Impact of Reconfiguration and Termination Opportunities

Program	Element No.	Element Title	FY 1991	FY 1992	FY 1993	FY 1994	FY 1995	FY 1996	6-YEAR TOTAL
Recurring Savings (Operation and Maintenance)									
Intelligence and Communications	0303126	Long-Haul Communications	$2,578,782[1/]	$2,676,776	$2,773,140	$2,864,653	$2,953,458	$3,045,015	$16,891,824
Total Recurring Savings			$2,578,782	$2,676,776	$2,773,140	$2,864,653	$2,953,458	$3,045,015	$16,891,824
Nonrecurring Costs (Operation and Maintenance)									
Intelligence and Communications	0303126	Long-Haul Communications	($ 135,624)						($ 135,624)
Total Nonrecurring Cost			($ 135,624)						($ 135,624)
Total Net Savings			$2,443,158	$2,676,776	$2,773,140	$2,864,653	$2,953,458	$3,045,015	$ 16,756,200[2/]

Footnotes:

1/ The amount shown is a projection of a statistical sample that is plus or minus 16.9 percent or plus or minus $435,365 at a 90-percent confidence level.

2/ This chart summarizes results identified in Appendixes C and D. Net savings in the first year are based on estimated costs to lease the circuits and to buy and install the equipment needed for the reconfigurations proposed in this report. True costs, when known, may slightly alter savings estimates. Using the FY 1991 recurring savings ($2,578,782) for the base year, we applied the established DoD inflation factors (3.80 percent for FY 1992, 3.60 percent for FY 1993, 3.30 percent for FY 1994, 3.10 percent for FY 1995, 3.10 percent for FY 1996) for the next 5 fiscal years and calculated the total net savings for the Future Years Defense Program to be approximately $16.8 million.

Appendix H. Schedule of Future Years Defense Program Impact of a Termination Opportunity for a Non-Sample Circuit

Program	Element No.	Element Title	FY 1991	FY 1992	FY 1993	FY 1994	FY 1995	FY 1996	6-YEAR TOTAL
Recurring Savings (Operation and Maintenance)									
Intelligence and Communications	0303126F	Long-Haul Communications	$ 2,256	$ 2,342	$ 2,426	$ 2,506	$ 2,584	$ 2,664	$ 14,778
Total Recurring Savings			$ 2,256	$ 2,342	$ 2,426	$ 2,506	$ 2,584	$ 2,664	$ 14,778
Total Recurring Savings			$ 2,256	$ 2,342	$ 2,426	$ 2,506	$ 2,584	$ 2,664	$ 14,778

Note: This chart summarizes results identified in Appendix E. Since the circuit represented above is not part of our audit sample, cost savings for it are projected separately for the Future Years Defense Program and are not included in the statistical projection of our audit results for the San Antonio area. Using the FY 1991 recurring savings ($2,256) for the base year, we applied the established DoD inflation factor (3.80 percent for FY 1992, 3.60 percent for FY 1993, 3.30 percent for FY 1994, 3.10 percent for FY 1995, 3.10 percent for FY 1996) for the next 5 fiscal years and calculated the total net savings for the Future Years Defense Program to be approximately $15,000.

Appendix I. Results of Reevaluation

The CCSDs in italics are shown in Appendix D and the remainder of the CCSDs are listed in Appendix C under the various categories and tables.

CCSDs [1/] Retained from Draft Report

Department of the Army

CCSD	CCSD	CCSD
UTNX 6J2N	UWJD 24JS	USA9 72JH
UUED 7EST	UWJD 24JU	US29 754D
UUED 7ESU	UWJD 26F3	
UUBV 7KHK	URED 7WXA	
UUBV 7KHN	URED 7YFP	

Department of the Air Force

CCSD	CCSD	CCSD	CCSD
JAKD 7BVY	JRPD 7ECX	JUE9 7555 [2/]	*JAK9 74J4*
JAKD 7CC5	JRPD 7EX4	JUE9 7556	*JAKD 7B4S*
JAKD 7H6F	JRPD 7FB3	JUE9 75Q4	*JAKD 7BOH*
JAKD 7H6G	JRPD 7FB4	JUE9 75ZG	*JAKD 7BS3*
JAKD 7H6H	JRPD 7GRP	JUE9 75ZH	*JAKD 7GXZ*
JAKD 7H6J	JRPD 7GYH	JUE9 75ZJ	*JRPD 7DS6*
JAKD 7H6K	JRPD 7HBQ	JUE9 76YT	*JUE9 75Q3*
JAKD 7JTT	JRPD 7JJN	JUE9 774U	*JZQ9 76Y4*
JAKD 7SKP	JRPD 7KZG	JUE9 77FR	
JAKD 7WQZ	JRPD 7NCX	JUE9 7837	
JAKD 7ZDK	JRPD 7PNX	JUE9 78EA	
JAKD 7ZTN	JRPD 7XPP	JUED 7DTW	
JAKM 7CJM	JRPD GD75	JYED 2AFW	
JAKM 7JHN	JRPM 7EPA	JZQ9 72E0	
JAKM 7JTB	JT1X 6G0E	JZQ9 72EY	
JAKM A293	JTDD 7BY0	JZQ9 72EZ	
JQAD 7UFH	JTIX 6H8L	JZQ9 753J	
JRP9 72ZF	JTNX 6G44	JZQD 7DVK	
JRP9 730L	JTNX 6J1S	JZQD 7F8E	
JRPD 7E0L	JUE9 72VK	JZQD 7YDD	

Defense Logistics Agency

CCSD
NSUD 7A2G

Defense Mapping Agency

CCSD
NUED 7CDH
NUED 7E8X

See footnotes on next page.

CCSDs [1/] Added as a Result of Reevaluation

Department of the Army

CCSD
URE9 72ZZ

Department of the Air Force

CCSD	CCSD
JAK9 74J1	JRPD 7FM3
JAK9 7813	JRPD 7JZB
JAKD 7BT6	JRPD 7PVY
JAKM 7GV5	JT1X 6N8V

1/ Command Communications Service Designator.
2/ This circuit, which was initially recommended for termination in the draft report, is now recommended for DDN rehoming.

Appendix J. Summary of Potential Benefits Resulting from Audit

Recommendation Reference	Description of Benefit	Amount and/or Type of Benefit
1. and 2.	Economy and Efficiency. Reconfiguring and terminating the circuits identified helps ensure that the most effective, efficient, and least costly service is obtained.	Monetary benefits of $8,870,880* (Funds put to better use-Budget year 1994). Appropriation-Operation and Maintenance

*Using statistical sampling techniques, we determined that reconfiguration and termination solutions could reduce the cost of the 857 DCS circuits by a projected $2,578,782 annually (plus or minus 16.9 percent or plus or minus $435,365 at a 90-percent confidence level). The 6-year total net cost reductions and net recurring cost reductions over the Future Years Defense Program (FY 1991 through FY 1996) pertaining to the cutoff date for the audit as shown in Appendixes G and H amounted to $16,770,978. However, because of the time elapsed since the audit universe cutoff date; the date that the circuit reconfigurations and terminations were identified to management in our draft report; and the nature of the management comments on the draft report, the potential cost avoidances of about $7.9 million for FY 1991 through FY 1993 may not have been realized and have been deleted from the total net recurring savings. The remaining $8.9 million should be put to better use.

Appendix K. Organizations Visited or Contacted

Office of the Secretary of Defense

Office of the Assistant Secretary of Defense (Command, Control, Communications and Intelligence), Washington, DC

Department of the Army

Office of the Director of Information Systems for Command, Control, Communications and Computers, Washington, DC
Headquarters, U.S. Army Information Systems Command, Fort Huachuca, AZ
U.S. Army Commercial Communications Office, Fort Huachuca, AZ
Fort Sam Houston, TX

Department of the Air Force

Office of the Assistant Chief of Staff, Systems for Command, Control, Communications and Computers, Washington, DC
Headquarters, Air Training Command, Randolph Air Force Base, TX
Headquarters, Military Personnel Center, Randolph Air Force Base, TX
Headquarters, Air Force Command, Control, Communications, and Computer Agency, Scott Air Force Base, IL
Air Force Telecommunications Certification Office, Scott Air Force Base, IL
Brooks Air Force Base, TX
Kelly Air Force Base, TX
Lackland Air Force Base, TX
Randolph Air Force Base, TX
Computer Services Center, San Antonio, TX

Defense Agencies

Defense Communications Agency*
Acquisition Management Organization, Washington, DC
Defense Commercial Communications Office, Scott Air Force Base, IL
Telecommunications Management and Services Office, Scott Air Force Base, IL
Resource Management Directorate, Washington, DC
Defense Communications Systems Organization, Washington, DC
Information Management Organization, Washington, DC

*Now the Defense Information Systems Agency.

Appendix L. Report Distribution

Office of the Secretary of Defense

Assistant Secretary of Defense (Command, Control, Communications and Intelligence)
Assistant to the Secretary of Defense for Public Affairs
Comptroller of the Department of Defense

Department of the Army

Auditor General, Department of the Army

Department of the Navy

Auditor General, Naval Audit Service

Department of the Air Force

Secretary of the Air Force
Assistant Secretary of the Air Force (Financial Management and Comptroller)
Auditor General, U.S. Air Force Audit Agency

Defense Agencies

Director, Defense Contract Audit Agency
Director, Defense Information Systems Agency
Director, Defense Logistics Agency
Inspector General, Defense Intelligence Agency
Inspector General, National Security Agency
Director, Defense Logistics Studies Information Exchange

Non-DoD Organizations

Office of Management and Budget
U.S. General Accounting Office
National Security and International Affairs Division
Technical Information Center

Non-DoD Organizations (cont'd)

Chairman and Ranking Minority Member of Each of the Following Congressional Committees and Subcommittees:

Senate Committee on Appropriations
Senate Subcommittee on Defense, Committee on Appropriations
Senate Committee on Armed Services
Senate Committee on Commerce, Science, and Transportation
Senate Subcommittee on Communications, Committee on Commerce, Science, and Transportation
Senate Committee on Governmental Affairs
House Committee on Appropriations
House Subcommittee on Defense, Committee on Appropriations
House Committee on Armed Services
House Subcommittee on Oversight and Investigations, Committee on Armed Services
House Committee on Energy and Commerce
House Subcommittee on Telecommunications and Finance, Committee on Energy and Commerce
House Committee on Government Operations
House Subcommittee on Legislation and National Security, Committee on Government Operations

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Part IV - Management Comments

Department of the Army

Final Report Reference

DEPARTMENT OF THE ARMY
OFFICE OF THE SECRETARY OF THE ARMY
WASHINGTON, DC 20310-0107

Office, Director of Information Systems for Command, Control, Communications, & Computers

SAIS-PSP (36-5c)

19 OCT 1990

MEMORANDUM FOR INSPECTOR GENERAL, DEPARTMENT OF DEFENSE, ATTN: AUDITING, 400 ARMY NAVY DRIVE, ARLINGTON, VIRGINIA 22202-2884

SUBJECT: Draft Audit Report on Telecommunications Circuit Allocation Programs - San Antonio Area (Project No. ORD-0043.01)

The following comments are provided in response to the HQDA, SAIG-PA memorandum dated 10 Jul 90, subject as above.

Deleted

Recommendation 1a stated: Examine each of the Army circuits identified as potential reconfiguration candidates listed in Appendix C to determine the technical feasibility for and the associated net cost savings from reconfiguration.

Concur with the recommendation. The US Army Commercial Communications Office examined each of the Army circuits but did not find any that could be reconfigured by Army to achieve any resulting cost savings. Enclosure 1 gives detailed information to support continuing the present configuration. Since reconfiguration on a DOD-wide basis may produce different results, this recommendation should also be directed to the Defense Communications Agency (DCA).

13 - Readdressed to DISA as Recommendation 1.

Recommendation 1b stated: Require the appropriate user activity to initiate Requests for Service to reconfigure those circuits identified as technically feasible so that the most efficient and cost effective service is obtained.

Concur with the recommendation. Based on the information provided by the examination of recommendation 1a above, none of the circuits discussed require reconfiguration. If the DCA evaluation of DOD-wide reconfiguration indicates a more efficient configuration, Army will initiate the appropriate Requests for Service.

13 Readdressed to DISA as Recommendation 1.

Recommendation 1c stated: Require the appropriate user activity to initiate Requests for Service to rehome those Defense Data Network (DDN) circuits identified in Appendix D so that the most efficient and cost effective configuration is obtained.

SAIS-PSP (36-5c)
SUBJECT: Draft Audit Report on Telecommunications Circuit Allocation Programs - San Antonio Area (Project No. ORD-0043.01)

Concur with the recommendation. The two Fort Sam Houston circuits identified, US29754D and UAS972JH, need to be rehomed as specified in the report. Since DCA as the DDN System Manager must model and approve all DDN circuits, Army will request quick approval based on the economic advantage of rehoming these circuits. Army will submit Requests for Service for the rehoming as soon as DCA approval is received.

Army does not agree with the draft report's estimated annual savings. The draft audit report projected monthly savings of $629 for UAS972JH and $523 for US29754D. Army's actual monthly cost savings from this action are expected to be $235.90 for UAS972JH and $340.54 for US29754D. The disagreement arises from the fact that charges for equipment will remain the same when the circuits are rehomed. Only the mileage portion of the costs will be reduced. A detailed explanation of the Army projections is at enclosure 2.

ODISC4 POC for this action is MAJ R. Jones, SAIS-PSP, (703) 614-0320.

Enclosures

JESSE J. TROTTER
Colonel, GS
Deputy Director for Policy

Copy Furnished
SAIS-AE
SAFM
ASIR

SAIS-PSP (36-5c)

SUBJECT: Enclosure 1 (Examination of Potential Reconfiguration Candidates) to Draft Audit Report on Telecommunications Circuit Allocation Programs - San Antonio Area (Project No. ORD-0043.01)

The following comments are provided in response to recommendation 1a of the subject audit.

Recommendation 1a stated for Army to examine each of the Army circuits identified as potential reconfiguration candidates in Appendix C to determine the technical feasibility for and the associated net cost savings from reconfiguration. There were five basic proposals for reconfiguration.

Proposal: Multiplex circuits UTNX6J2N, UUED7EST, UUED7ESU, and URED7WXA together between Fort Sam Houston and St Louis. RESPONSE: Circuits UUED7EST and UUED7ESU are already channels riding on trunk UTNX6J2N so this part of the finding is redundant. Circuit URED7WXA cannot be added to the trunk because it is a 2.4kbs multi-point DARMS circuit originating at Fort Sam Houston with drops at St Louis, Fort Leonard Wood, and Little Rock. Since DARMS uses WECO Dataphone II Level II diagnostics monitoring and control from the host computer, a circuit cannot be multiplexed without losing the required monitoring and control capability. The DARMS network is comprised of a WANG VS-100 host computer at each CONUS Major Army Command (MACOM) headquarters with 2.4kbs multipoint circuits going from the host to each Reserve and National Guard component location within the CONUSA areas of responsibility. Each DARMS host is connected to the DDN running the X.25 DDN Standard to allow interoperability between the DARMS host computers and other computers. Each terminal at the remote location is a WANG PC running a synchronous protocol that is not compatible with the ports of a DDN TAC. WANG makes an X.25 basic assembly that can be used in each individual PC for connection into the DDN, but is not viable because a PC equipped with X.25 Basic could not talk to the host which is running X.25 Standard. This would mean that each individual PC running X.25 would require the same host DDN port connection into a DDN node that the host computer requires which would not only be cost prohibitive, but technically impossible because DCA only has a limited number of host port connections available. DARMS circuits cannot be connected to the DDN by a gateway because the DARMS host computers do not have INTERNET protocol. If DDN was technically feasible, the optimum configuration would cost approximately $1,636 monthly to connect the four locations, assuming that gateway connections are available at Fort Sam

SAIS-PSP (36-5c)
SUBJECT: Enclosure 1 (Examination of Potential Reconfiguration Candidates) to Draft Audit Report on Telecommunications Circuit Allocation Programs - San Antonio Area (Project No. ORD-0043.01)

Houston and St Louis. The other two locations do not have gateways available. This cost estimate is based upon node connections for two locations, gateway connections for two locations, and estimated access circuit costs. If ports are not available at the gateways, the DDN connection cost would increase substantially. However, even the estimated optimum DDN configuration cost of $1,636 does not compare favorably with the monthly multipoint circuit lease cost of $1,566, especially since port availability is not assured, and connection to the DDN is not technically feasible.

Proposal: Multiplex circuits UWJD24JU and URED7YFP together between Fort Sam Houston and Fort Bliss. RESPONSE: Circuit UWJD24JU is a point-to-point 1.2kbs secure WWMCCS circuit between top secret facilities running secure traffic at the top secret level. Circuit URED7YFP is a 2.4kbs multipoint DARMS circuit originating at Fort Sam Houston with drops at San Antonio, Fort Bliss, Fort Hood, and Seogoville. this circuit cannot be multiplexed for the same reasons given for DARMS circuit URED7WXA above.

Proposal: Start a T1 trunk between Fort Sam Houston and Austin and route circuits UUBV7CB2, UUBV7KHK, UUBV7KHN, UUBV7KU3, UUBV7SUX, and UUBV7UJM on the trunk with leased tail segments from Austin to San Marcos, and Austin to Bryan to provide the OPX connectivity. RESPONSE: A cost analysis using this proposal did not prove to be cost effective. The total monthly recurring charge (MRC) for the existing six OPX circuits is $3,115. The cost estimate for a T1 pipe with tail segments, using AT&T as the default carrier, would bring the MRC up to $5,100, and that does not even include the cost of purchasing multiplexing equipment or AT&T service charges for installation. The $5,100 is based upon a MRC of $3,468 for the T1 pipe between Austin and Fort Sam Houston, and tail segment MRCs of $432 from Austin to San Marcos, and $1200 from Austin to Bryan. This solution is also dependent on whether the Air Force base in Austin is willing and has space for the multiplexors. Even if competition made it possible to acquire the T1 service at a 15 to 20 percent lower cost over the AT&T rates, the proposed solution would still not be cost effective. Fractional T1 is also cost prohibitive. The same requirements would exist for purchasing multiplexors and sharing Air Force facilities if the fractional T1 is configured the same way as the T1 solution. The MRC for such a configuration would be $3,961, or broken out, $2,329 for the 384kbs fractional T1 between Austin and Fort Sam Houston, and $432 for the tail segment to San Marcos, and $1200 to Bryan,

SAIS-PSP (36-5c)
SUBJECT: Enclosure 1 (Examination of Potential Reconfiguration Candidates) to Draft Audit Report on Telecommunications Circuit Allocation Programs - San Antonio Area (Project No. ORD-0043.01)

plus multiplexing and non-recurring installation costs. Direct fractional T1 does not fare any better because the MRC for just a 384kbs fractional T1 link to Bryan is $3,140, and that does not even consider San Marcos.

Proposal: Convert circuits UWJD24JS, UWJD24JU, and UWJD26F3 to dial-up service vice dedicated. RESPONSE: All three of these circuits are used in support of WWMCCS command and control. Converting the dedicated WWMCCS circuits at Fort Sam Houston to dial-up was discussed with the Army WWMCCS Information Systems Program Manager, Mr Art Taylor. Mr Taylor said the WWMCCS network is a JCS network, and it is configured in accordance with JCS Publications 6 and 19. Currently, dial-up service is only used where authorized. This will change because the WWMCCS network is currently being redesigned, and plans call for changing all dedicated circuits that run at speeds lower than 9.6kbs to dial-up. The redesign is a result of a COOP plan that has been approved by JCS, and the resulting changes will include the Fort Sam Houston circuits mentioned because of their speed requirements. Fort McPherson will submit requests for service (RFS) for all affected circuits after redesign plans are finalized.

Proposal: Circuit UJNV7B1T was disconnected effective 1 Feb 90, and no longer appears in the WWOLS database.

SAIS-PSP (36-5c)

SUBJECT: Enclosure 2 (Estimated Cost Savings) to Draft Audit Report on Telecommunications Circuit Allocation Programs - San Antonio Area (Project No. ORD-0043.01)

The following comments are provided in response to recommendation 1c of the subject audit.

Recommendation 1c required the appropriate user activity to initiate Requests for Service to rehome those Defense Data Network circuits identified in Appendix D so that the most efficient and cost effective configuration is obtained. Monthly recurring cost savings shown by the draft Audit Report are $523 for US29754D and $629 for UAS972JH. The Army estimates are $340 for US29754D and $236 for UAS972JH.

The Army estimates were extracted from official Inventory of Service records which are attached. The savings include mileage, conditioning, access coordination, management fees, and central office connection fees. Equipment and interface costs were included as savings in the DODIG estimate but not in the Army estimate because the requirement (and cost) for the termination equipment will not change when the service is rehomed.

Costs associated with circuit UAS972JH are as follows:

CSA	ABI35Q	SW35D
Mileage:	$ 0	$ 210.60 *
Conditioning:	$ 0	$ 24.30 *
Equipment:	$ 376.00	$ 18.00
Total:	$ 376.00	$ 252.90 ($253)

Grand Total: $629
Army estimated savings (* items): $235.00

Costs associated with circuit US29754D are as follows:

CSA	GTESD
Mileage:	$ 233.48 *
Access Coord:	$ 21.10 *
Mgmt Fee:	$ 65.96 *
Cent Ofc Conn:	$ 20.00 *
Equipment:	$ 202.00
Total:	$ 542.54

Grand Total: $543
Army estimated savings (* items): $341.00

Enclosure 2

Department of the Air Force

DEPARTMENT OF THE AIR FORCE
OFFICE OF THE CHIEF OF STAFF
UNITED STATES AIR FORCE
WASHINGTON, D.C. 20330

19 NOV 1990

MEMORANDUM FOR ASSISTANT INSPECTOR GENERAL FOR AUDITING
OFFICE OF THE INSPECTOR GENERAL OF THE DOD

SUBJECT: DOD(IG) Draft Audit Report on Telecommunications Circuit Allocation Programs - San Antonio Area (Project No. ORD-0043.01) (Your Memo, 5 Jul 1990) - INFORMATION MEMORANDUM

We appreciate this opportunity to comment on subject draft audit. We concur with the findings of the audit. We have initiated several actions to more cost-effectively obtain long-haul communications within the Air Force. Some of these initiatives include:

a. The Air Force Concentrator Program--requires Air Force Defense Data Network (DDN) users to access this network through a single base concentrator, significantly reducing the Air Force's DDN and circuit costs. Concentrators are currently installed at 128 bases, and we are in the process of rehoming all Air Force DDN users. Anticipated concentrator savings have been debited from the Air Force's budget submission.

b. The AFCC PILOT program and the Air Force Integrated Telecommunications Network (AFNET)--bundles leased circuits throughout the Air Force. The AFCC PILOT program reached IOC on 15 Oct 90, and responses to the AFNET Request for Proposals are currently in source selection. Most of the circuits recommended for bundling are planned for inclusion on these two networks. The expected bundling savings have been debited in our budget submission or credited to DMRD 924 (ADP Regionalization). An additional bundling decrement is expected through DMRD 968 (Long Haul Comm) and PBD 167 (Productivity Investment Fund).

c. Additionally, the Air Force currently requires a biennial review/revalidation of all its leased circuits. The four circuits identified in the audit for termination will most likely been identified for termination during this exercise.

Attached are additional comments/observations concerning this audit. In conclusion, we concur with the audit's findings, and request you document the positive long haul initiatives the Air Force has taken when finalizing the report.

LLOYD K. MOSEMANN, II
Deputy Assistant Secretary
(Communications, Computers & Logistics)

1 Attachment
Additional Comments

Final Report Reference

Additional Comments on
Telecommunications Circuit Allocation Programs -
San Antonio Area (Project No. ORD-0043.01)

1. Paragraph 1a, page 14: — Deleted

DOD(IG) RECOMMENDATION: Explain each of the Army and Air Force circuits identified as potential reconfiguration candidates listed in Appendix C to determine the technical feasibility for and the associated net cost savings from reconfiguration:

USAF RESPONSE: Concur. Much of this action was already completed as part of the ongoing AFCC Pilot Program and the Air Force Integrated Telecommunications Network (AFNET) Program initiatives. Of the 124 circuits identified for bundling, 109 are already PILOT/AFNET Program candidates. The remaining 15 circuits cannot be bundled cost effectively since PILOT/AFNET nodes are not planned at one or both ends of the circuits and the cost to extend the tail circuits from the AFNET nodes are too high to warrant cost effective bundling. These 15 circuits are: JAKD7J3V, JAKD7JWO, JAKD7JW6, JAKD7JXB, JAKD7JXJ, JAKD7KOF, JAKD7KOH, JAKD7K1Q, JAKD7K1X, JAKD7KR2, JAKD7KU8, JAKD7K25, JAKMA293, JT1X6GOE, and JUE978EA.

Bundling Schedule: The PILOT and AFNET programs are already underway. PILOT IOC was achieved on 15 Oct 90, with approximately 35 circuits scheduled to be bundled into the San Antonio area by 31 Oct. Responses to the AFNET RFP are currently under technical review, with contract award scheduled for Feb 91. The Air Force has provided $13M in seed funding for AFNET to purchase the necessary multiplexers and management systems.

Anticipated savings from these two programs has already been debited from the Air Force's FY92-FY97 budget submission or credited to DMRD 924 (ADP Regionalization). Additional funding decrements, associated with bundling, are currently under consideration by the OSD Comptroller under PBD 197 (Productivity Investment Fund) and DMRD 968 (Long Haul Comm). No additional savings are available.

2. Para 1b, page 14: — 13 Readdressed to DISA as Recommendation 1.

DOD(IG) RECOMMENDATION: Require the appropriate user activity to initiate Requests for Service (RFS) to reconfigure those circuits identified as technically feasible so that the most efficient and cost-effective service is obtained.

USAF RESPONSE: Concur. The Air Force Telecommunications Certification Office (AFTCO) has already been tasked to implement both the AFCC Pilot and AFNET programs. To assist them in this initiative, the Air Force has established a contract to perform site surveys at the initial thirty AFNET locations to identify circuits which can be cost effectively bundled. The transition onto PILOT, as stated above, has already begun.

Final Report Reference

13 Read-dressed to DISA as Recom-menda-tion 1.

3. Para 1c, page 14:

DOD(IG) RECOMMENDATION: Require the appropriate user activity to initiate Requests for Service to rehome those Defense Data Network circuits identified in Appendix D, so that the most efficient and cost-effective configuration is obtained.

USAF RESPONSE: CONCUR. Over the past two years the Air Force has procured and installed Defense Data Network (DDN) concentrators for each Air Force base. The Air Force has now directed rehoming of all host computers to go behind these concentrators NLT 31 Dec 90. Not doing so requires an exception. Installation of 128 concentrators is completed, and the resulted savings have already been taken into account in determining the Air Force's reduced FY91 DDN budget. Therefore, no additional savings are available.

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4. Para 2, page 14:

DOD(IG) RECOMMENDATION: We recommend that the Commander, Air Force Communications Command, require the appropriate user activity to initiate Requests for Service to disconnect those circuits listed in Appendix 3.

USAF RESPONSE: Partially agree. The total annual cost savings in this section should be reduced from $47,112 to $20,640 for the reasons indicated below. The final report should also note that the Air Force requires a biennial review and revalidation of all its leased circuits, and that this review began in May 90 with expected completion in Dec 90. This review/revalidation would have most likely discovered the four circuits identified below as termination candidates.

Section I. The following information applies to the schedule of circuits recommended for termination--No Requirements Exists section. Request you decrease the monthly recurring costs (MRC) from $2947 ($35,000 annually) to $1720 ($20,640 annually) for the reasons stated:

a. CCSD: JRPD 7DS6. Discontinued 3 Aug 90. Available MRC savings: $380.

b. CCSD: JAKD 7GXZ. To be discontinued 2 Nov 90. The cost of this circuit is only $101/month ($1212 annually) vice $405/month ($4860 annually) as indicated in the report. Available MRC savings: $101.

c. CCSD: JUE9 75Q3. Discontinued 1 Oct 90. Available MRC savings: $712.

d. CCSD: JAK9 74J4. No action taken. The Computer Services Center ordered this circuit to tie their IBM computer into the DDN. However, there is a technical problem with the IBM asynchronous interface with the DDN node. A solution is being worked and the circuit tested. Projected completion date for resolution is 31 Dec 90. Circuit disconnect and an order for a new start could not be accomplished in time, and problem resolution is much more difficult without the circuit being available for testing. Circuit will carry full-time DDN data when operational. Available MRC savings: 0.

e. CCSD: JUE9 7555. No action taken. This DDN circuit is part of the MEDNET. This net is used to cross feed information between clinics, medical technicians and doctors. The user advises four DOD auditors arrived during a Staff Assistance Visit resulting in a communications problem between the auditors and the medical administrator. The user states the circuit is still a valid requirement. Available MRC savings: 0.

f. CCSD: JZQ9 76Y4. Discontinue action in process, RFS generated on 28 Sep 90. Projected discontinuance is 15 Nov 90. Available MRC savings: $527.

g. CCSD JAKD 7B4S. No action taken, although this CCSD is being deleted from the DECCO data base. The PRDNOCY series of CCSDs are maintenance contracts against government owned Paradyne modems. PRDNOCY 48237 is matched to a single Paradyne modem which may associate to a new CCSD each time the modem is used in another configuration. AFMPC is revising this complex method of providing maintenance by establishing a single contract for maintenance and using serial numbers under this umbrella contract for tracking and identification. This should clean up the DECCO data base and provide a more efficient method of obtaining the maintenance services from Paradyne. Available MRC savings: $0.

Section II. The below information applies to the Activity Could Not Identify or Locate Section Appendix 3. Delete the total MRC of $979 ($47,112 annually) for the following reasons:

a. CCSD JRPD 7CYS. A review of the DECCO files indicates this service was discontinued on 9 Feb 88. An active record was in file until Jan 90 due to a billing closeout. This service was not being billed at the time of the audit and there was no using activity. Delete $83 MRC ($996 annually).

b. CCSD JZQD 7JKA/JZQD 7JKB. These CCSDs represent separate channels on a 9.6KBPS trunk under CCSD JTNX 6G44. The trunk was installed in 1978 with the two 4.8KBPS channels. Later, the service was transferred to a DCTN trunk under the same identifiers. The 7JKA/7JKB CCSDs do not represent billed service. The CCSD for the trunk is the real billing identifier. This service is installed, used, and still required. Delete $390 MRC ($4680 annually) from each entry.

c. CCSD JAKD 7BOH/JAKD 7BS3. These CCSDs represent two channels on a 9.6KBPS trunk leased from CONTEL under CCSD JT1X 65HL. A statistical TDM package terminates the service at each end. Various users at Randolph use the computer remotes to process information from a mainframe Honeywell computer at Scott AFB. The service is valid and used daily. Delete $58 MRC ($696 annually).

d. CCSD JUE9 76V5. A review of DECCO files indicates this circuit was discontinued in Oct 88. An active record was on file until Sep 89 due to a billing closeout. This service was not being billed at the time of the audit and there was no using activity.

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